

REAL ESTATE DOCUMENT MANAGEMENT SYSTEM AND METHOD OF GENERATING A REAL ESTATE TRANSACTION AGREEMENT

Technical Field

[0001] The present invention relates to a real estate document management system for generating a real estate transaction agreement. The present invention further provides a method of generating a real estate transaction agreement.

Background

[0002] When a tenant leases a property from a landlord, a tenancy agreement to be signed by both party is required. The document is usually prepared by an agent either representing the landlord or the tenant and is to be signed by both parties. Before the agreement is signed, the tenant would discuss with the landlord about the tenancy terms. If an agent is engaged, the agent would have to go between the landlord and the tenant to arrange for a mutual agreement on the tenancy terms. Once both parties are agreeable on the tenancy terms, the tenancy agreement will be prepared for both parties to be signed. As it can be appreciated, the process leading to the signing of the tenancy agreement can be time-consuming and tedious.

[0003] The present invention aims to alleviate or solve the issues mentioned above.

Summary

[0004] According to various embodiments, a real estate document management system for generating a real estate transaction agreement is provided. The system includes a document module configured to receive a request to generate the transaction agreement, such that the request comprises a document type identifier, retrieve a document template related to the document type identifier from a document database, transmit the document template to a first device, receive a first signature from the first device and append the first signature to the document to form a signed document, transmit the signed document to a second device, receive a second signature from the second device and append the second signature into the signed document to form the transaction agreement.

[0005] According to various embodiments, the document module may be configured to receive a user identifier from the first device, retrieve user data related to the user identifier from a user database, and append the user data to the document template.

[0006] According to various embodiments, the document module may be configured to receive a property identifier from the first device, retrieve property data related to the property identifier from a property database, and append the property data into the document template.

[0007] According to various embodiments, the document module may be configured to receive a device app identifier from the first device, authenticate the device app identifier and generate a device app authentication status.

[0008] According to various embodiments, the document module may be configured to authenticate a user of the first device when the first signature is received from the first device.

[0009] According to various embodiments, the document module may be configured to receive a first approval signal from the first device, transmit the document template to the second device, receive a second approval signal from the second device and transmit the second approval signal to the first device.

[0010] According to various embodiments, the document module may be configured to receive a document expiry period, generate a document transmission date, retrieve a current date, generate a time lapsed period based on the document transmission date and the current date, and generate an expired status if the time lapsed period exceeds the document expiry period.

[0011] According to various embodiments, a method for generating a real estate transaction agreement is provided. The method includes receiving a request to generate the transaction agreement, such that the request comprises a document type identifier, retrieving a document template related to the document type identifier from a document database, transmitting the document template to the first device, receiving a first signature from the first device and

appending the first signature to the document to form a signed document, transmitting the signed document to a second device; and receiving a second signature from the second device and appending the second signature into the signed document to form the transaction agreement.

[0012] According to various embodiments, the method may further include receiving a user identifier from the first device, retrieving user data related to the user identifier from a user database, and appending the user data to the document template.

[0013] According to various embodiments, the method may further include receiving a property identifier from the first device, retrieving property data related to the property identifier from a property database, and appending the property data to the document template.

[0014] According to various embodiments, the method may further include receiving a device app identifier from the first device, authenticating the device app identifier and generating a device app authentication status.

[0015] According to various embodiments, the method may further include authenticating a user of the first device when the first signature is received from the first device.

[0016] According to various embodiments, the method may further include receiving a first approval signal from the first device, transmitting the document template to the second device, receiving a second approval signal from the second device and transmitting the second approval signal to the first device.

[0017] According to various embodiments, the method may further include receiving a document expiry period, generating a document transmission date, retrieving a current date, generating a time lapsed period based on the document transmission date and the current date, and generating an expired status if the time lapsed period exceeds the document expiry period.

[0018] The present invention provides a fast and convenient system and method of generating a transaction agreement between two parties.

Brief Description of Drawings

[0019] Fig. 1 shows an example of a real estate document management system for generating a real estate transaction agreement.

[0020] Fig. 2 shows a method for generating a real estate transaction agreement.

[0021] Fig. 3A-3R show examples of the GUI of the application in the first device.

[0022] Fig. 4 shows another example of a method for generating the transaction agreement.

[0023] Fig. 5 shows an example of the document module.

[0024] Fig. 6A and Fig. 6B show an exemplary API diagram of the document handling module and the document engine which are the document handling module and document engine as shown in Fig. 5 respectively.

[0025] Fig. 7 shows an example of the management system generating an LOI.

[0026] Fig. 7B shows an example of the management system generating the LOI via a plurality of agents.

[0027] Fig. 8A shows an example of the management system being used by an agent.

[0028] Fig. 8B shows an example of the management system being used by a plurality of agents.

[0029] Fig. 9 shows an example of a block diagram of a computing device.

Detailed Description

[0030] Fig. 1 shows an example of a real estate document management system 100 for generating a real estate transaction agreement. Management system 100 includes a document module 110 configured to receive a request 112 to generate the transaction agreement, such that the request 112 includes a document type identifier 124. Upon receiving the request 112, the document module 110 is configured to retrieve a document template 124 related to the document type identifier 124 from a document database 120 and transmit the document template 124 to the first device 10. Document module 110 is configured to receive a first signature 116 from the first device 10 and append the first signature 116 to the document to form a signed document 126. Document module 110 is configured to transmit the signed document 126 to a second device 20, receive a second signature 118 from the second device 20 and append the second signature 118 to the signed document 126 to form the transaction agreement 128. Appending of the first signature 116 and the second signature 118 can be performed in real-time. Request 112 may be received from the first device 10. Request 112 may be received from a third device (not shown in Fig. 1), e.g. from an agent. Real estate document management system 100 provides an easy and convenient way for parties of a tenancy agreement to sign and complete the agreement.

[0031] Real estate document management system 100 may include a server configured to host the document module 110. Server may be configured to communicate with the first device 10 and the second device 20 via known methods, e.g. WAN, LAN. Server may include the document database 120 for storing document data and a plurality of document template 124. Document module 110 may include a document application programming interface (API).

[0032] First device 10 may include an application configured to display a graphical user interface (GUI) on the first device 10. First device 10 may be a computing device, e.g. a mobile phone, a laptop, a desktop. A first user, e.g. a landlord, may input instructions to the management system 100 via the application in the first device 10. A second user, e.g. a tenant, may input instruction to the management system 100 via the second device 20. Second device 20 may be a computing device, e.g. a mobile phone, laptop, desktop. For easy

understanding, the landlord may be the first user and the tenant may be the second user. Landlord may choose the type of document that he or she wishes to create, e.g. a tenancy agreement, option to purchase.

[0033] Fig. 2 shows a method 200 for generating a real estate transaction agreement 128. Method 200 may include receiving a request 112 to generate the transaction agreement at block 210, retrieving a document template 124 related to the document type identifier 124 from a document database 120 at block 220, transmitting the document template 124 to the first device 10 at block 230, receiving a first signature 116 from the first device 10 and appending the first signature 116 to the document to form a signed document 126 at block 240; transmitting the signed document 126 to a second device 20 at block 250, and receiving a second signature 118 from the second device 20 and appending the second signature 118 into the signed document 126 to form the transaction agreement 128 at block 260. Method 200 may be a computer-implemented method.

[0034] Prior to the use of the application, the document module 110 may authenticate the landlord who is using the first device 10. Application on the first device 10 may require the landlord to log into the application via a log in page of the application. Landlord may enter a user identifier into the application. First device 10 may be configured to receive the user identifier from the landlord. First device 10 may transmit the user identifier to the document module 110. Document module 110 may receive the user identifier, authenticate the user identifier and generate an authentication status. If the authentication status is positive, the document module 110 may transmit a positive authentication status to the first device 10. Upon positive authentication, the first device 10 may display a GUI for the landlord to operate the application.

[0035] Landlord may choose, via the application, at least one of a document type and property selection. Landlord may have a few properties listed in the application and is required to select the property for generating the transaction agreement 128. First device 10 may be configured to receive at least one of the document type and the property selection from the landlord. First device 10 may be configured to generate a document type identifier 124 based on the document type. First device 10 may also generate a property identifier based

on the property selection made. Upon selection, the landlord may send a request 112 to generate the document. First device 10 may receive the request 112 to generate the document and transmit the request 112 to the document module 110. Request 112 may include at least one of the document type identifier 124 and the property identifier.

[0036] Upon receiving the request 112, the document module 110 may retrieve the document template 124 related to the document type identifier 124 from a document database 120 and transmit the document template 124 to the first device 10.

[0037] Fig. 3A-3R show examples of the GUI of the application in the first device 10. Fig. 3A shows an example of a page 302 for the landlord to enter document data, e.g. name, identification number, email address, for the generation of the transaction agreement 128. If the user database does not contain the user data, the landlord may input user data via the page 302. In addition, the landlord may input account details as shown in page 304 in Fig. 3B. When the landlord completes the input of document data, a page 306 as shown in Fig. 3C may display that the document data required for the transaction agreement 128 is completed, i.e. all items checked.

[0038] First device 10 may display the document template 124. Landlord would be able to view the document template 124 on the first device 10 as shown in page 308 in Fig. 3D. Document template 124 may contain a set of pre-determined terms. After reviewing the document template 124, the landlord may forward the document template 124 to the tenant for the client to review. Landlord may input the tenant email address or select the tenant email as shown in page 310 in Fig. 3E.

[0039] Management system 100 may be configured to provide a pre-signing approval between both the landlord and tenant. In this way, the tenancy terms may be reviewed by both parties and consented upon before signing. Landlord may transmit a first approval signal from the first device 10 to the document module 110 to indicate that he or she is agreeable with the tenancy terms. Document module 110 may receive the first approval signal. Upon receiving the first approval signal, the document module 110 may transmit the document template 124 to the second device 20. Document module 110 may transmit the document

template 124 to the second device 20. If the transmission is successful, a successful transmission page 312 as shown in Fig. 3F may be displayed. Second device 20 may display the document template 124 for the tenant to view. If the tenant is agreeable with the set of terms in the document template 124 as displayed on the second device 20, the tenant may input an approval signal to the second device 20. Tenant may transmit a second approval signal to the document module 110. Fig. 3H shows a page 316 wherein the second device 20 provides the tenant an option to initiate an approval signal, e.g. proceed to sign. Second device 20 may receive an approval signal and transmit it to the document module 110. Document module 110 may receive the second approval signal from the second device 20 and transmit the second approval signal to the first device 10. Upon receiving the second approval signal from the tenant, the landlord may proceed to sign the document template 124. As shown in page 326 in Fig. 3M, the landlord may choose the relevant document template 124 to sign. Landlord may view the document template 124 again as shown in page 328 in Fig. 3N. If the landlord is agreeable with terms in the document template 124, the landlord may proceed to sign the document template 124 as shown in page 330 in Fig. 3P. First device 10 may receive the first signature 116, i.e. the landlord's signature, and transmit the first signature 116 to the document module 110. Application may display a confirmation page 332 on the first device 10 as shown in Fig. 3M for the landlord to confirm the transmission of the signed document 126. Document module 110 is configured to receive the first signature 116 from the first device 10. Document module 110 may append the first signature 116 to the document to form the signed document 126. Document module 110 is configured to transmit the signed document 126 to a second device 20. Second device 20 may display the signed document 126 as shown in page 334 in Fig. 3N. Tenant may view the signed document 126 on the second device 20. If the tenant is agreeable with signed document 126, the tenant may proceed to sign the signed document 126 as shown in page 336 in Fig. 3P. Second device 20 may receive the second signature 118, i.e. the tenant's signature, and transmit the second signature 118 to the document module 110. Document module 110 may receive a second signature 118 from the second device 20. Document module 110 may append the second signature 118 to the signed document 126 to form the transaction agreement 128. Transaction agreement 128 may be a tenancy agreement or the like that is signed by both the landlord and the tenant. Document module 110 may transmit the transaction agreement 128 to the landlord and the tenant by transmitting the transaction agreement 128 to the first device 10 and the second device 20 as shown in page 338 in Fig. 3Q. Document module 110 may store the

transaction agreement 128 in the document database 120. Application may display a completion page 340 as shown in Fig. 3R in the first device 10 and the second device 20. Alternatively, the landlord may proceed to sign the document template 124 without first transmitting the document template 124 to the tenant for preview and transmit the signed document 126 to the tenant for the tenant to sign. First signature 116 and second signature 118 may be an image, an alphanumeric string, a pin number etc.

[0040] Application may be configured to allow the landlord to enter account details for the tenant to make a payment. As shown in page 304 in Fig. 3B, the first device 10 may display a page for the landlord to enter payment detail. Application may be configured to receive the tenant communication detail, e.g. email address, phone number.

[0041] Second device 20 may be installed with the application installed in the first device 10 such that the second device 20 may communicate with the document module 110 via the application. Alternatively, the document module 110 may transmit an email notification with an embedded website link to the second device 20. In this way, the tenant may be able to be directed to a website hosted by the server where the tenant would be able to view the signed document 126. Document module 110 may include a http handler configured to handle the process between the document module 110 and the website. Second device 20 may receive the signed document 126 from the document module 110 and display the signed document 126 on the second device 20. Tenant may be able to sign the signed document 126 via the application or the website. In this way, the tenant may be able to comment on the tenancy terms, highlight corrections, etc. Comments may be transmitted to the document module 110 to be forwarded to the first device 10. In the event that the tenant is not agreeable with the signed document 126, the tenant may reject the signed document 126. Second device 20 may receive a rejection signal from the tenant and transmit the rejection signal to the document module 110 which may transmit it to the first device 10. If the tenant is agreeable with the tenancy terms, the tenant may proceed to sign the templated document. Document module 110 may receive the second signature 118 and transmit it to the document module 110.

[0042] Once the transaction agreement 128 is completed, the document module 110 may transmit the transaction agreement 128 to the first device 10 and the second device 20 such that the landlord and the tenant may each receive an electronic copy of the transaction

agreement 128. Document module 110 may transmit an email with an embedded link to the transaction agreement 128 to the first device 10 and second device 20. Landlord and the tenant may access the transaction agreement 128 from the document data via the embedded link. Upon completion of the transaction agreement 128, the document module 110 may generate and transmit a payment notification to the second device 20 to notify the tenant of the payment details, e.g. account number, payment amount, for the tenancy.

[0043] Fig. 4 shows another example of a method 400 for generating the transaction agreement 128. Landlord may fill up a form displayed by the application at block 402 to input document data for generating the document template 124. Landlord may provide a document expiry period for the document at block 404. In this way, the document has to be signed with the expiry period. Otherwise, the document will become invalid and the second signature 118 may not be accepted anymore. Landlord, upon receiving the document template 124, may preview it at block 406. Landlord may invite the tenant to review the document template 124 so that the tenancy terms may be reviewed by both parties and consented upon before signing. Landlord may allow the document module 110 to transmit the document template 124 to the tenant at block 408. Document module 110 may, upon receiving the first approval signal, transmit the document template 124 to the second device 20. If the tenant is agreeable with the set of terms in the document template 124 as displayed on the second device 20, the tenant may input an approval signal to the second device 20 to confirm at block 410. Tenant may transmit a second approval signal to the document module 110. Upon receiving the second approval signal from the tenant, the landlord may proceed to sign the document template 124 at block 412. Alternatively, the landlord may not invite the tenant to review the document template 124 and proceed to sign the document template 124. Once the document template 124 is signed by the landlord, the landlord may transmit the signed document 126 or offer to the tenant. Document module 110 may be configured to transmit the signed document 126 to the tenant for signing at block 414. At this juncture, the document module 110 may record the signed document 126 in the document database 120. Alternatively, the document module 110 may record the signed document 126 in the document database 120 at block 416. As shown in Fig. 4, the document database 120 may reside in a blockchain. At block 418, the tenant may accept or reject the offer or post question or comments to the landlord. If the tenant is agreeable with signed document 126, the tenant may proceed to sign the signed document 126 at block 420. At this juncture, the document

may record the transaction agreement 128 in the document database 120 or Blockchain at block 422.

[0044] As mentioned, the landlord may input the expiry period into the first device 10 via the application. First device 10 may transmit the expiry period to the document module 110. Document module 110 may receive the document expiry period, generate a document transmission date, retrieve a current date from the server, generate a time lapsed period based on the document transmission date and the current date, and generate an expired status if the time lapsed period exceeds the document expiry period. Document module 110 may append the document transmitted date to the signed document 126 when the signed document 126 is transmitted to the second device 20. In this way, the landlord is able to determine a duration for the signed document 126 to be signed by the tenant so that the interest of the landlord can be protected.

[0045] There may be one or more empty fields in the document template 124. First device 10 may be configured to allow the landlord to input document data into the document template 124 such that the landlord may fill in the empty fields. First device 10 may receive document data from the landlord. Thereafter, the first device 10 may transmit the document data to the document module 110. Document module 110 may store the document data into the document database 120. Document module 110 may also retrieve document data from databases. Document module 110 may retrieve user data related to the user identifier from a user database and append the user data into the document template 124. Document module 110 may also retrieve property data related the property identifier from a property database and append the property data to the document template 124. Document module 110 may transmit the document template 124 with the appended data to the first device 10 for the landlord to review. If there are still vacant fields to be completed after appending the data, the landlord may enter document data to fill in the vacant fields. Upon confirmation of the data entry, the first device 10 may transmit the document data to the document module 110. Document module 110 may then store the document data into the document database 120. Document module 110 may generate a list of questions based on the document type identifier 124 to assist the landlord in providing the document data. Document module 110 may transmit the list of questions to the first device 10. First device 10 may display the list of questions together with the document template 124. Document data may include at least one

of the user data and property data. Document data may include photographs of the property. Data captured by the databases may further be rendered into analytics. In this way, the management system 110 may make use of the data to provide a more efficient and effective management system.

[0046] When a landlord enters a new property record into the management system 100, the landlord may enter the property data for the new property into the first device 10 via a new property form. Upon completion of the entry, the first device 10 may transmit the property data to the document module 110. Document module 110 may validate the property data to ensure that the property data is accurate. For example, the document module 110 may validate that the new property is owned by the landlord. Document module 110 may communicate with a server of an authority to validate the property data. Document module 110 may include a validator configured to validate the property data.

[0047] Management system 100 may include one or more security features to ensure a more secured system for the generation of the transaction agreement 128. Management system 100 may be configured to provide a secured platform for the signing of the documents so as to prevent unauthorised signing of documents. When the first device 10 transmits the signature to the document module 110, i.e. when the landlord signs the document template 124, the document module 110 may be configured to authenticate a user, i.e. the landlord, when the first signature 116 is received from the first device 10. For example, the document module 110 may transmit an authentication code to the first device 10 for the landlord to enter into the application of the first device 10, e.g. 2-factor authentication. Document module 110 may transmit an email notification to the first device 10 to inform the landlord that a signature is received for the document template 124 and requests the landlord to notify the administrator of the management system 100 if the signature does not belong to the landlord. In this way, the management system 100 may be able to ensure that signature is provided by an authorised person.

[0048] Document engine may generate a unique digital signature based on the first signature 116 or the second signature 118. Document engine may capture user-specific information, e.g. user identifier, user location, time of signature, and hash it with the first signature 116 or the second signature 118. In this way, the unique digital signature may be traced to the signor

so as to mitigate fraud. A signature creation module may be configured to create the unique digital signature. Signature creation module may be configured to generate a unique signature for the transaction agreement 128 by hashing document specific information, e.g. device identifier, time of completion, location of document signed, to the transaction agreement 128.

[0049] Document module 110 may be configured to authenticate the application on the first device 10 used to send the request 112. First device 10 may be configured to transmit a device app identifier. Document module 110 may be configured to receive the device app identifier from the first device 10, authenticate the device app identifier and generate a device app authentication status. Document module 110 may include an authenticator configured to authenticate the application. Authenticator may be configured to authenticate the user identifier. To authenticate the user identifier, the first device 10 may transmit the user identifier to the authenticator. Upon authentication, the first device 10 may receive the authentication status from the authenticator.

[0050] Management system 100 may be configured to provide an inventory list function for the landlord to list down the inventory items to be included in the tenancy. Document module 110 may be configured to transmit an inventory list form to the first device 10. Landlord may enter the items in the property into the inventory list form. Upon completion of the inventory list form, the first device 10 may transmit the inventory items to the document module 110 to be stored in the property database. Document module 110 may transmit the inventory items to the second device 20 for the tenant to view.

[0051] Fig. 5 shows an example of the document module 510. Document module 510 may include a document handling module 530 for handling the documents and a document engine 550 for processing the documents. Document module 510 may be a document API. Document handling module 530 may communicate with external devices, e.g. the first device 10, second device 20, and the document engine 550. Document handling module 530 may be configured to receive document data and request for document template 524. Document handling module 530 may include at least one of the authenticator 532 and the validator 534. Validator 534 may validate the property data before transmitting the property data to the document engine 550 for processing. Validator 534 may validate the user data as well.

Document handling module 530 may transmit the request and document data to the document engine 550. Document engine 550 may be in communication with the document database 520. Document engine 550 may retrieve the document template 524 from a document template database. Document engine 550 may process the document template 524 by appending the document data and first signature and second signature to the document template 524. Document engine 550 may transmit the completed document, i.e. the transaction agreement 528, to the document handling module 530 to be transmitted to first device 10 and second device 20. Document engine 550 may store the completed document in the document database 520. Document engine 550 may generate an email request and transmit the email request to document handling module 530. Email request may include at least one of the email content, email addresses and the transaction agreement 558. Document handling module 530 may include email module 536 configured to generate the email and transmit the email to the respective parties. Authenticator 532 may authenticate the email request to ensure that the email request is transmitted from the document engine 550. Similarly, the document engine 550 may authenticate the request from the document handling module 530 to ensure that the request is transmitted by the document handling module 530. Document handling module 530 may include a http handler 538. Document handling module 530 may be configured to communicate with at least one of a payment gateway 540 for the payment of the lease and tax department 542. Document engine 550 may include the signature creation module.

[0052] Management system 100 may be configured to provide a progress status update of the generation of transaction agreement 128. Document module 110 may be configured to track the progress of the signing. Document module 110 may compute the number of parties in the signing and the number of stages required to complete the signing of the transaction agreement 128. Referring to Fig. 4, the document module 110 may classify the signing process into various stages as shown on the right side of the figure. When each stage of the process is completed, e.g. receiving the first signature 116, the document module 110 may update the status of the stages and compute a completion percentage. Document module 110 may transmit the completion percentage to the first device 10 to keep the landlord updated. For example, the receipt of the first signature 116 from the first device 10 may be 25% of the progress. Upon completion, the document module 110 may transmit a 100% completion

percentage to the first device 10 to inform the landlord that the transaction agreement 128 is completed. Examples of the status update may be found in Fig. 3J, Fig. 3L, Fig. 3M etc.

[0053] Fig. 6A and Fig. 6B show an exemplary API diagram of the document handling module 630 and the document engine 650 which are the document handling module 530 and document engine 550 as shown in Fig. 5 respectively.

[0054] Management system 100 may be configured to provide a system for generating a letter of intent (LOI) before the generation of the transaction agreement 128. Tenant may be interested to lease a property from the landlord. Tenant may offer a certain tenancy terms to the landlord. Tenant may input into the tenancy terms into the second device 20 via the application. Application may provide a LOI template for the tenant to complete. Tenant may input tenancy terms, e.g. duration of lease, monthly lease amount. Second device 20 may receive the set of tenancy terms and transmit the set of tenancy terms to the document module 110. Document module 110 may receive the set of tenancy terms to the first device 10 for the landlord to review. Landlord may input an accept signal or reject signal into the first device 10 and transmit the signal to the document module 110. If the reject signal is received, the document module 110 may transmit a reject notification to the second device 20 to notify tenant of the same. If the accept signal is received, the document module 110 may transmit an accept notification to the second device 20 and transmit a generate transaction agreement 128 query to the first device 10 to provide the landlord an option to generate the transaction agreement 128, i.e. the tenancy agreement. If the landlord wishes to generate the transaction agreement 128, the landlord may input the request 112 to into the first device 10 to generate the transaction agreement 128. First device 10 may transmit the request 112 to the document module 110. Document module 110 may receive the request 112 and process the request 112 as described earlier. In addition, the document module 110 may store the set of tenancy terms as document data into the document database 520. Document module 110 may append the set of tenancy terms to the document template 124 before transmitting the document template 124 to the first device 10 for the landlord to review. In this way, the landlord does not have to review the set of tenancy terms all over again. By doing so, time will be saved and the accuracy of the tenancy terms in the document template 124 is preserved.

[0055] Fig. 7A shows an example of the management system 750 generating the LOI. In this example, the LOI is prepared via an agent having a third device 30. Tenant may instruct the agent to generate the LOI based on the required set of tenancy terms at 702. Agent may generate the LOI based on an LOI template and transmit the LOI template to the second device for the tenant to review. If the tenant is agreeable with the LOI template, the tenant may sign the LOI template via the second device 20 at block 704. Signed LOI may be transmitted by the document module 110 to the first device for the landlord to review. Landlord may review the signed document which incorporates the tenancy terms. Landlord may sign the LOI template via the first device 10 and transmit the template to the agent and/or the tenant at block 706. Tenant may receive the signed LOI and make the necessary payment for the lease at block 708. After the LOI is signed by both parties, the agent may be notified at block 710. Agent may prepare the generation of the transaction agreement as described above at block 712. It may be necessary to mention that the generation and signing process is similar to the signing process as described earlier for the generation of the transaction agreement.

[0056] Fig. 7B shows an example of the management system 760 generating the LOI via a plurality of agents. In this example, there is a plurality of agents, e.g. two agents, agent A and agent B. LOI is prepared via an agent having a third device 30. Tenant may instruct the agent to generate the LOI based on the required set of tenancy terms at 702. Agent A may generate the LOI based on an LOI template and transmit the LOI template to the second device 20 for the tenant to review 703. If the tenant is agreeable with the LOI template, the tenant may sign the LOI template via the second device 20 at block 704. Unlike the previous example, the signed LOI may be transmitted by the document module 110 to the third device for the agent A to review. Agent A may forward the signed LOI to a fourth device 40, belonging to agent B, via the document module 110 at 704A. Agent B may review and forward the signed LOI to the landlord at block 705. Landlord may review the signed document which incorporates the tenancy terms. Landlord may sign the LOI template via the first device 10 and transmit the template to the agents and/or the tenant at block 706. Tenant may receive the signed LOI and make the necessary payment for the lease at block 708. Agent B may prepare the generation of the transaction agreement as described above at block 712. It may be necessary to mention that the generation and signing process is similar to the signing process as described earlier for the generation of the transaction agreement.

[0057] Fig. 8A shows an example of the management system 850 being used by an agent. A third device 30 may be used by the agent or a third party assisting the transaction. Landlord may instruct the agent to generate the transaction agreement at 862. Third device 30 may transmit the request to the management system 100, i.e. the document module 110. Document module 110 may receive the request to generate the transaction agreement from the third device 30. Upon receiving the request 112, the document module 110 may be configured to retrieve a document template 122 related to the document type identifier 124 from a document database 120 and transmit the document template 122 to the third device 30 for the agent to review. Agent may transmit the document template 122 to the landlord for the document to be signed by the landlord. Agent may transmit an instruction, via the third device, to the document module 110 to transmit the document template 122 to the first device for the landlord to review the document template 122. Upon receiving instructions from the third device 30, the document module 110 may transmit the document template 122 to the first device 10 for the landlord to review and sign at block 864. When the landlord signs the document template 122, the first device 10 may receive the first signature and transmit it to the document module 110. Document module 110 may be configured to receive a first signature 116 from the first device 10 and append the first signature 116 to the document to form the signed document 126. Document module 110 is configured to receive the first signature 116 from the first device 10 and append the first signature 116 to the document to form a signed document 126. Document module 110 may transmit the signed document 126 to the second device 20 for the tenant to review at block 866. Alternatively, the document module 110 may transmit the signed document 126 to the third device 30 for the agent to review. Thereafter, the agent may transmit the signed document 126 to the second device 20 for the tenant to review. When the tenant signs the signed document 126, the document module 110 may receive a second signature 118 from the second device 20 and append the second signature 118 to the signed document 126 to form the transaction agreement 128 at block 868. Appending of the first signature 116 and the second signature 118 can be performed in real-time. Landlord and the agent may be notified on the completion of the signing by the tenant in block 870.

[0058] Fig. 8B shows an example of the management system 860 being used by a plurality of agents. In Fig 8B, there are two agents, agent A and agent B. Similar to Fig. 8A, Landlord

may instruct agent A to generate the transaction agreement at 862. Third device 30 may transmit the request to the management system 100, i.e. the document module 110. Document module 110 may receive the request to generate the transaction agreement from the third device 30. Upon receiving the request 112, the document module 110 may be configured to retrieve a document template 122 related to the document type identifier 124 from a document database 120 and transmit the document template 122 to the third device 30 for the agent to review. Agent may transmit the document template 122 to the landlord for the document to be signed by the landlord. Agent A may transmit an instruction, via the third device, to the document module 110 to transmit the document template 122 to the first device for the landlord to review the document template 122. Upon receiving instructions from the third device 30, the document module 110 may transmit the document template 122 to the first device 10 for the landlord to review and sign at block 864. When the landlord signs the document template 122, the first device 10 may receive the first signature and transmit it to the document module 110. Document module 110 may be configured to receive a first signature 116 from the first device 10 and append the first signature 116 to the document to form the signed document 126. Document module 110 is configured to receive the first signature 116 from the first device 10 and append the first signature 116 to the document to form a signed document 126. Document module 110 may transmit the signed document 126 to the third device 30 for the agent to forward the signed document 126 to the fourth device 40 at agent B at 866. Alternatively, the document module 110 may transmit the signed document 126 to the second device 20 for the tenant to review. Thereafter, the agent B may verify the transaction agreement and forward it to the second device 20 for the tenant to review if it is in order at block 867. When the tenant signs the signed document 126, the document module 110 may receive a second signature 118 from the second device 20 and append the second signature 118 to the signed document 126 to form the transaction agreement 128 at block 868. Appending of the first signature 116 and the second signature 118 can be performed in real-time. All parties, i.e. the landlord, the agent A and agent B may be notified on the completion of the signing by the tenant in block 870.

[0059] Fig. 9 shows an example of a block diagram of a computing device 1000, e.g. a server, configured for the system 100. Computing device 1000 may include one or more processors 1100 and a system memory 5200. Processor 1100 may include a multi-core

processor. Computing device 1000 may include a memory bus 1300 for communication between the processor 1100 and the system memory 5200.

[0060] Processor 1100 may include but not limited to a microprocessor (μ P), a microcontroller (μ C), a digital signal processor (DSP), or any combination thereof. Processor 1100 may include one more levels of caching, such as a level one cache and a level two cache, two or more processor cores, and registers. Processor core may include an arithmetic logic unit (ALU), a floating point unit (FPU), a digital signal processor core (DSP Core), or any combination thereof. Processor 1100 may include a memory controller 1520. Processor 1100 may include a location prediction module configured to facilitate prediction of a location of a given memory address based upon a memory address distribution table of memory addresses stored by the on-chip caches of one or more of the processor cores.

[0061] System memory 5200 may include but not limited to volatile memory (such as RAM), non-volatile memory (such as ROM, flash memory, etc.) or any combination thereof. System memory 5200 may include an operating system 1210, one or more applications 1220, and program data 1230. Application 1220 may be arranged to operate with program data 1220 on the operating system 1230. Application 1220 may include algorithm for the method 200, e.g. verifying the request 112 received from the operator. Program data 1230 may include the operator data, flight data, etc. Computer device 1000 may include a bus/interface controller 1400 configured to facilitate communication between the processor 1100/system memory 5200 and a data storage device 1600 via the storage interface bus 1500.

[0062] As shown in Fig. 9, the data storage devices 1600 may be at least one of removable storage devices 1620 and non-removable storage devices 1640. Removable storage devices 1620 and non-removable storage devices 1640 may include magnetic disk devices such as flexible disk drives and hard-disk drives (HDD), optical disk drives such as compact disk (CD) drives or digital versatile disk (DVD) drives, solid state drives (SSD), and tape drives, etc. User database, property database, document database 520 may be stored in the data storage devices 1600.

[0063] System memory 5200, removable storage devices 1620, non-removable storage devices 1640 are examples of computer storage media. Computer storage media may also include RAM, ROM, EEPROM, flash memory, CD-ROM, optical storage, e.g. DVD, magnetic cassettes, magnetic tape, magnetic disk storage, etc.

[0064] Computing device 1000 may include various interface devices, e.g. output device 1720, peripheral interfaces 1740, communication devices 1760. Computing device 1000 may include an interface bus 1800 configured to facilitate communication between the processor 1100, system memory 5200, storage devices 1600 and the interface devices.

[0065] Output devices 1720 may include a graphics processing unit (GPU) 1722 configured to communicate to a display and an audio process unit (APU) 1724 configured to communicate with a speaker via one or more A/V ports 1720.

[0066] Peripheral devices 1740 may include a serial interface controller (SIC) 1742 or a parallel interface controller 1744 configured to communicate with external devices such as input devices (e.g., keyboard, mouse, pen, voice input device, touch input device, etc.) or other peripheral devices (e.g., printer, scanner, etc.) via one or more I/O ports 1746.

[0067] Communication device 1760 may include a network controller 1762, configured to facilitate communications with one or more other computing devices 1002 over a network communication link via one or more communication ports 1764. For example, the computing device 1000 may communicate with first device 10, second device 20.

[0068] Network communication link may be one example of a communication media. Communication media may typically be embodied by computer readable instructions, data structures, program modules, or other data in a modulated data signal, such as a carrier wave or other transport mechanism, and may include any information delivery media. A “modulated data signal” may be a signal that has one or more of its characteristics set or changed in such a manner as to encode information in the signal. For example, communication media may include wired media such as a wired network or direct-wired connection, and wireless media such as acoustic, radio frequency (RF), microwave, infrared

(IR) and other wireless media. The term computer readable media as used herein may include both storage media and communication media.

[0069] Computing device 1000 may be a portable (or mobile) electronic device, e.g. a cell phone, a personal data assistant (PDA), a personal media player device, a wireless web-watch device, a personal headset device, an application specific device, or a hybrid device that include any of the above functions. Computing device 1000 may also be a personal computer including both laptop computer and non-laptop computer configurations, e.g. desktop.

[0070] It should be appreciated that all the information in system database may be maintained in one or more databases or on each of a plurality of databases using distributed database technology. Further, it should be appreciated that the system 100 may be hosted on one server or a plurality of servers connected via the network.

[0071] The present invention relates to a system generally as herein described, with reference to and/or illustrated in the accompanying drawings. Further, the present invention relates to a method generally as herein described, with reference to and/or illustrated in the accompanying drawings.

[0072] A skilled person would appreciate that the features described in one example may not be restricted to that example and may be combined with any one of the other examples.

[0073] In the following examples, reference will be made to the figures, in which identical features are designated with like numerals.

[0074] The present invention relates to a system and method generally as herein described, with reference to and/or illustrated in the accompanying drawings.

Claim

1. A real estate document management system for generating a real estate transaction agreement, the system comprising
 - a document module configured to:
 - receive a request to generate the transaction agreement, wherein the request comprises a document type identifier;
 - retrieve a document template related to the document type identifier from a document database;
 - transmit the document template to a first device;
 - receive a first signature from the first device and append the first signature to the document to form a signed document;
 - transmit the signed document to a second device; and
 - receive a second signature from the second device and append the second signature into the signed document to form the transaction agreement.
2. The system of claim 1, wherein the document module is configured to receive a user identifier from the first device, retrieve user data related to the user identifier from a user database, and append the user data to the document template.
3. The system of claim 1 or 2, wherein the document module is configured to receive a property identifier from the first device, retrieve property data related to the property identifier from a property database, and append the property data into the document template.
4. The system of any one of claims 1 to 3, wherein the document module is configured to receive a device app identifier from the first device, authenticate the device app identifier and generate a device app authentication status.
5. The system of any one of claims 1 to 4, wherein the document module is configured to authenticate a user of the first device when the first signature is received from the first device.

6. The system of any one of claims 1 to 5, wherein the document module is configured to receive a first approval signal from the first device, transmit the document template to the second device, receive a second approval signal from the second device and transmit the second approval signal to the first device.
7. The system of any one of claims 1 to 6, wherein the document module is configured to receive a document expiry period, generate a document transmission date, retrieve a current date, generate a time lapsed period based on the document transmission date and the current date, and generate an expired status if the time lapsed period exceeds the document expiry period.
8. A method for generating a real estate transaction agreement, the method comprising
receiving a request to generate the transaction agreement, wherein the request comprises a document type identifier;
retrieving a document template related to the document type identifier from a document database;
transmitting the document template to the first device;
receiving a first signature from the first device and appending the first signature to the document to form a signed document;
transmitting the signed document to a second device; and
receiving a second signature from the second device and appending the second signature into the signed document to form the transaction agreement.
9. The method of claim 8, further comprising receiving a user identifier from the first device, retrieving user data related to the user identifier from a user database, and appending the user data to the document template.
10. The method of claim 8 or 9, further comprising receiving a property identifier from the first device, retrieving property data related to the property identifier from a property database, and appending the property data to the document template.

11. The method of any one of claims 8 to 10, further comprising receiving a device app identifier from the first device, authenticating the device app identifier and generating a device app authentication status.

12. The method of any one of claims 8 to 11, further comprising authenticating a user of the first device when the first signature is received from the first device.

13. The method of any one of claims 8 to 12, further comprising receiving a first approval signal from the first device, transmitting the document template to the second device, receiving a second approval signal from the second device and transmitting the second approval signal to the first device.

14. The method of any one of claims 8 to 13, further comprising receiving a document expiry period, generating a document transmission date, retrieving a current date, generating a time lapsed period based on the document transmission date and the current date, and generating an expired status if the time lapsed period exceeds the document expiry period.

REAL ESTATE DOCUMENT MANAGEMENT SYSTEM AND METHOD OF GENERATING A REAL ESTATE TRANSACTION AGREEMENT

Abstract

A real estate document management system for generating a real estate transaction agreement is provided. The system includes a document module configured to receive a request to generate the transaction agreement, such that the request comprises a document type identifier, retrieve a document template related to the document type identifier from a document database, transmit the document template to a first device, receive a first signature from the first device and append the first signature to the document to form a signed document, transmit the signed document to a second device, receive a second signature from the second device and append the second signature into the signed document to form the transaction agreement. A method of generating a real estate transaction agreement

Fig. 1