METHOD FOR PLANNING A TRAVEL ITINERARY

Technical Field

The present disclosure generally relates to a method for planning a travel itinerary. More particularly, the present disclosure describes various embodiments of, but not limited to, a method that allows users to plan, book, and manage a travel itinerary by themselves.

Background

People often travel overseas on short trips, vacations, or holidays, be it for casual sightseeing, relaxation, honeymoon, or for business purposes. Some people may choose to purchase a travel package and avoid the hassle of planning travel itineraries, while others may choose the free and easy option for holidays. Thus, creating travel itineraries is crucial in planning for a holiday or an overseas trip. However, it may be challenging trying to plan a trip when there are multiple bookings to be made on that trip. Such bookings include items like accommodation, tours, and attractions. Moreover, there may be travel constraints like the dates of the trip, number of people travelling, number of rooms required, etc. Although, this can be made slightly easier with the availability of web-based or online systems, it still requires the user to check individual websites for the availability of the items to be booked, and thereafter having to amend the initial booking when a subsequent booking for another item is not available on that date or conflicts with another item.

There are some solutions out there that remove the planning element, preferring to suggest and/or automate the creation of a travel plan that user does not have control over, except for minimal input. There are other solutions that assist the user to plan a travel itinerary, such as that disclosed in United States Patent Publication 2005/0216301. The patent publication US 2005/0216301 discloses a method for planning a travel itinerary by incrementally adding activities thereto. The method calculates the available start times of each activity and determines whether the user is able to add the activity to the travel itinerary, depending on the end times of the

previous activity. Even so, the method disclosed in the patent publication US 2005/0216301 does not provide an overall picture of the travel itinerary to the user, and does not allow the user to freely plan for and book different activities at different dates of the travel itinerary. Users are becoming more discerning and may prefer to plan their own holidays and travel trips by selecting specific travel products that are appealing to them. However, there is currently no system that can both offer a centralised travel planner and booking system under a single easy-to-use user interface, such that the bookings over multiple web-based systems can be consolidated into a single trip plan.

Therefore, in order to address or alleviate at least one of the aforementioned problems and/or disadvantages, there is a need to provide method for planning a travel itinerary, in which there are improved features over the prior art at least in part.

Summary

According to an aspect of the present disclosure, there is provided a method for planning a travel itinerary. The method comprises: presenting at least a portion of a timeline of the travel itinerary on a user interface (UI) of a computing device, the timeline extending between a first date and a second date, the timeline being segmented into a plurality of time frames arranged in chronological order, each of the plurality of time frames defining a time range. The method further comprises enabling populating of each of the plurality of time frames with at least one selected service item, the at least one selected service item being selected from a plurality of reference service items. Each of the plurality of reference service items has a time limit, the time limits of each of the at least one selected service item populating each of the plurality of time frames corresponding with the time range thereof.

An advantage of the present disclosure is that the method allows a user to view a timeline of a travel itinerary and populate the travel itinerary with various service items. The method thus creates a centralized trip planner that is able to display and address multiple service items at the same time, while ensuring that any time limits of the service items corresponding within the respective time frames of the timeline.

A method for planning a travel itinerary according to the present disclosure is thus disclosed hereinabove. Various features, aspects, and advantages of the present disclosure will become more apparent from the following detailed description of the embodiments of the present disclosure, by way of non-limiting examples only, along with the accompanying drawings in which like numerals represent like components.

Brief Description of the Drawings

FIG. 1A is a flowchart of a method according to an embodiment of the present disclosure.

FIG. 1B is a schematic diagram of a travel itinerary according to an embodiment of the present disclosure.

FIG. 2A to FIG. 2D show various screen captures of a computing device according to an embodiment of the present disclosure.

FIG. 3 shows a screen capture of a computing device according to an embodiment of the present disclosure.

FIG. 4A to FIG. 4C show various screen captures of a mobile device according to an embodiment of the present disclosure.

FIG. 5A to FIG. 5D show various screen captures of a mobile device according to an embodiment of the present disclosure.

FIG. 6 shows a screen capture of a mobile device according to an embodiment of the present disclosure.

FIG. 7A to FIG. 7C show various screen captures of a mobile device according to an embodiment of the present disclosure.

FIG. 8 shows a screen capture of a mobile device according to an embodiment of the present disclosure.

Detailed Description

For purposes of brevity and clarity, descriptions of embodiments of the present disclosure are limited hereinafter to a method for planning a travel itinerary, in accordance with the drawings in FIG. 1A to FIG. 8. While aspects of the present disclosure will be described in conjunction with the embodiments provided herein, it will be understood that they are not intended to limit the present disclosure to these embodiments. On the contrary, the present disclosure is intended to cover alternatives, modifications and equivalents, which may be included within the spirit and scope of the present disclosure as defined by the appended claims. Furthermore, in the following detailed description, numerous specific details are set forth in order to provide a thorough understanding of the present disclosure. However, it will be recognized by an individual having ordinary skill in the art, i.e. a skilled person, that the present disclosure may be practiced without these specific details. In other instances, well-known systems, methods, procedures, and components have not been described in detail as not to unnecessarily obscure aspects of the embodiments of the present disclosure.

In embodiments of the present disclosure, a method 100 for planning a travel itinerary 200 is described hereinafter.

FIG. 1A shows a flowchart of the method 100. The method 100 may be implemented using a software application executed or running on a computing device, such as a personal computer or a laptop. The method 100 may also be implemented using a mobile application executed or running on a mobile device, such as a smartphone. In the present disclosure, a user refers to a person who is using the method 100 on his computing device to plan his travel itinerary.

The method 100 comprises a step 110 of presenting at least a portion of a timeline 202 of the travel itinerary 200 on a user interface (UI) of a computing device of the

user. FIG. 1B shows a schematic diagram of a travel itinerary 200; and FIG. 2A shows a screen capture of the travel itinerary 200 being presented on the UI of a computer during implementation of the method 100 thereon. The timeline 202 extends between a first date 204 and a second date 206. The first date 204 refers to the starting date of the travel itinerary 200, i.e. 27 April 2015 as shown in FIG. 2A. The second date 206 refers to the ending date of the travel itinerary 200, i.e. 7 May 2015 as shown in FIG. 2A. Depending on the starting date 204 and ending date 206, the travel itinerary 200 may denote the trip as occurring in the future, current (i.e. presently travelling), or has already occurred.

The timeline 202 is segmented or separated into a plurality of time frames 208 arranged in chronological order. In the schematic diagram shown in FIG. 1B and the screen capture shown in FIG. 2A, each time frame 208 corresponds with one of a plurality of dates extending from the first date 204 to the second date 206, i.e. each time frame 208 refers to a date within the timeline 202. Each of the plurality of time frames 208 define a time range 210. Thus, each time frame 208 refers to a date having a time range 210 from 0000 hours to 2359 hours. If the timeline 202 of the travel itinerary 200 is too long to be displayed in its entirety on the user interface of the computing device, the travel itinerary 200 can be paginated so as to display only some of the time frames 208 of the timeline 202 at any one time. The user can move back and forth along the timeline 202 to view different parts of the travel itinerary 200.

The method 100 further comprises a step 120 of enabling populating of each of the plurality of time frames 208; and a step 130 for populating each of the plurality of time frames 208 with at least one selected service item 300. The at least one selected service item 300 is selected from a plurality of reference service items 302. Each of the plurality of reference service items 302 has a time limit 304, such that each of the at least one selected service item 300 has its time limit 304. The time limits 304 of each of the at least one selected service item 300 populating each of the plurality of time frames 208 corresponds with the time range 210 of each time frame 208. Thus, one or more than one selected service item 300 can populate a single time frame 208 with a time range 210, and that the time limits 304 of the selected service item(s) 300 correspond with the time range 210. The time limits 304

thus do not extend beyond the time range 210. Advantageously, the user can plan multiple service items 300 (selected from among the plurality of reference service items 302) within his travel itinerary 200, knowing that the time limits 304 of each service item 300 will be kept within the time range 210 of each time frame (date) 208 during implementation of the method 100.

As shown in FIG. 2A, other details of the travel itinerary 200 viewable on the user interface of the computing device include the travel location or destination 212, and the number of people travelling 214 during the trip. The number of people 214 can be further defined as the number of adults 214a and the number of children 214b. The user may choose to edit his travel itinerary 200 using the edit function 216, such as to amend the starting date 204, ending date 206, destination 214, and/or number of people 214.

In a matter of preference, the user may choose to display his travel itinerary 200 in a calendar format using the calendar function 218. FIG. 2A shows the travel itinerary 200 being displayed in a calendar format resembling a weekly calendar. In the calendar format, the user can move backwards and forwards within the dates on the calendar. Alternatively, the user may choose to display his travel itinerary 200 in a list format. The list format can be generated by the user using the summary function 220, as shown in FIG. 2B. FIG. 2B also shows the travel itinerary 200 being displayed in a list format.

Other functions provided by the method 100 include editing a user profile using the profile function 222, as shown in FIG. 2C. FIG. 2C also shows a screen capture of editing the user profile of the user, including particulars such as name and contact details. The user profile allows for identification of the user using the method 100. In various embodiments, the method 100 is connected to a back-end server that contains information on the user profiles, the information being stored in a user database or member database. Multiple users can use the method 100 simultaneously. As such, it is advantageous to identify each user by their own unique user profile, together with their personal username login and password. In some instances, a user may decide to plan for multiple travel itineraries 200, such as to

plan for multiple trips at the same time, or to plan for contingencies. FIG. 2D shows a screen capture of a list of travel itineraries 200 belonging to a user. The list of travel itineraries 200 is accessible using the itinerary function 224. New travel itineraries 200 can be created by the user using the create function 226, while existing itineraries can be viewed using the view function 228 or deleted using the delete function 230. The plurality of travel itineraries 200 can be paginated so that a user may move forward and backward over their travel history.

Referring to FIG. 2A to FIG. 2D in general, the user can populate his travel itinerary 200 with activities or service items 300 selected from the plurality of reference service items 302. The plurality of reference service items 302 may be categorized into tour services, transportation services, accommodation services, activity services, and any combination thereof. In various embodiments, the reference service items 302 are categorized into at least four categories – Stay & Play category 306, Stay category 308, Play category 310, and Go category 312. Other categories such as combinations or segregation of at least one of the aforementioned categories (306, 308, 310, and 312) are possible. There may also be new categories such as Eat and Drink. This would be readily known and apparent to a person having ordinary skill in the art.

The Stay & Play category 306 includes reference service items 302 belonging to a combination of accommodation, sightseeing, tour, and activity services. The accommodation services may include lodgings such as hotels, hostels, apartments, and the like. The sightseeing, tour, and/or activity services may include local land tours, admissions to theme parks, museum tickets, and the like.

The Stay category 308 includes reference service items 302 belonging to a accommodation services. The accommodation services may include lodgings such as hotels, hostels, apartments, and the like.

The Play category 310 includes reference service items 302 belonging to sightseeing, tour, and/or activity services. The sightseeing, tour, and/or activity services may include local land tours, admissions to theme parks, museum tickets, and the like.

The Go category 312 includes reference service items 302 belonging to transportation services. The transportation services may include transfer from airport to hotel, car rentals, domestic flights, coaches, and the like.

The reference service items 302 in the respective categories (306, 308, 310, and 312) are provided by one or a plurality of travel vendors. The method 100 allows the user to access and browse the reference service items 302, which are stored in their respective travel product databases in the aforementioned back-end server. The user may browse the reference service items 302 based on the categories or types of activities, or the user may browse based on the travel vendors. For example, a user may have a preference for a particular travel vendor, such as a local travel agency, and may want to select all travel products from this particular travel vendor. The travel vendor(s) are stored in a vendor database in the back-end server, allowing the user to access the names and details of the travel vendors that are providing the travel products or reference service items 302.

The user can select any service item 300 from any categories of the reference service items 302 in order to populate his travel itinerary 200. In the user interface of the computing device, the user can add a service item 300 by using the add function 232. For example, in FIG. 2B, the user can use the “add hotel” function 232a to add a hotel which belongs to the Stay category 308; the user can use the “add things to do” function 232b to add tours and activities which belong to the Play category 310; and/or the user can use the “add transfer” function 232c to add an airport transfer service which belongs to the Go category 312.

Thus, by using the method 100 implemented on a software application running on the computing device of the user, the user has the ability to have online or web-based access to a wide range of travel products (reference service items 302). With this access, the user can plan and select the appropriate travel products (selected service items 300) for his travel itinerary 200, thereby giving the user the opportunity to design his preferred holiday experience. Additionally, the method 100 allows the user to save certain travel products or reference service items 302 to his user profile.

If the user browses and finds an interesting service item 302 but does not want to add it to his travel itinerary 200 yet, he can save or bookmark this item under his user account. The user can also choose to save or bookmark the item into their respective categories for ease of sorting. The user can subsequently access the list of bookmarked items using the bookmark function 234. In the bookmark function 234, the user can also retrieve the bookmarked items for review, edit, or deletion. If or when the user eventually decides to select one or more of the bookmarked items as selected service items 300, the user can populate them into this travel itinerary 200.

As described above, the method 100 allows the user to search and browse for various travel products or reference service items 302, before selecting some of the travel products as selected service items 300 which are then populated into the travel itinerary 200. When searching for a travel product 302, the user is required to input at least some of the following parameters:

i. Country, City, or Region (i.e. travel destination 212)
ii. Dates of Travel (i.e. starting date 204 and ending date 206)
iii. Number of Days and/or Nights
iv. Number of People (214)
v. Number of Adults 214a and their respective ages
vi. Number of Children (214b) and their respective ages

It would be readily known and understood by a person having ordinary skill in the art to vary and modify the required parameters that are inputted by the user when using the method 100.

The method 100 further comprises a step of activating a logic system in the back-end server in response to receiving the parameters inputted by the user. Based on the input parameters, the logic system uses a predetermined searching algorithm to generate search results of travel products 302 that are applicable to the user. The travel products 302 generated by the logic system may be based on certain booking conditions that are set or administered by the travel vendors. For example, certain travel products 302 have the following booking conditions that may be associated with the parameters inputted by the user:

i. City or Region – e.g. whether the travel product is available at the desired location
ii. Validity of Contract – e.g. whether the travel vendor is able to provide the travel product or travel service within the travel dates of the user
iii. Advance Purchase – e.g. how early before the travel date is the travel product purchased
iv. Close-out Dates – e.g. the dates when the travel product is unavailable
v. Day of Service – e.g. the dates when the travel product is available
vi. Minimum Number of Adults – e.g. some travel products require a minimum number of adults in order to take place, such as for travel products from the Play category 310 (e.g. land tours)
vii. Minimum Number of Days – e.g. some travel products require a minimum number of days in order to take place, such as for travel products from the Go category 312 (e.g. car rental)
viii. Minimum Number of Nights – e.g. some travel products require a minimum number of nights in order to take place, such as for travel products from the Stay category 308 (e.g. accommodation)
ix. Maximum Number of People – e.g. some travel products have a maximum number of people it can take (e.g. for car rentals or coach services)

It would be readily known and understood by a person having ordinary skill in the art to vary and modify the booking conditions that are administered by the travel vendors in the method 100.

The searching algorithm of the logic system associates the booking conditions with the parameters inputted by the user. Depending on the parameters, particularly the number of adults 214a, the number of children 214b, and their respective ages, some travel products may have preferential promotions and/or rates that will be beneficial to the user. These are managed or administered by a Promotion Manager system and a Rate Manager system.

In the Promotion Manager system, travel products 302 such as hotels and car rentals have promotional packages that may appeal to users, if the user parameters

satisfy certain booking conditions of the promotional packages. These booking conditions may include at least one of validity of contract, advance purchase, close-out dates, and days of service, as described above. The promotional packages may include family packages (2 adults and 2 children), discount packages (e.g. first adult pays 100% of the cost and the second adult pays 50% of the cost, or the first child gets a free item with 2 paying adults). Promotional packages for sightseeing activities or tours include purchasing multiple tours at discounted prices, or purchasing one or two tours and getting another tour for free. Promotional packages for accommodation services like hotels include discounted rates for staying a minimum number of nights, paying only after completion of the stay, or paying for two nights and getting the third night free. Promotional packages for transport services like car rentals include discounted rates for booking the car for a minimum number of days.

In the Rate Manager system, travel products 302 may be offered to users at preferential or discounted rates based on the ages of the people travelling. For example, preferential rates can be given to seniors, children, and/or infants who satisfy the age requirements. Different travel products 302 would have different definitions of the age limits for the seniors, children, and/or infants. As an example, a senior is defined as aged above 60; an adult is defined as aged between 18 and 60, a child is defined as aged between 6 and 18, and an infant is defined as aged below 6. The preferential rates for the travel products 302 can thus be defined according to the age ranges of the respective persons travelling.

The user begins the browsing for travel products 302 by inputting various user parameters described above. After all the required user parameters are inputted, the searching algorithm of the logic system searches the databases for travel products 302 that are relevant to the user. In some embodiments, the searching algorithm performs the search by analysing the following conditions sequentially:

i. City or Region
ii. Validity of Contract
iii. Advance Purchase
iv. Close-out Dates

v. Day of Service
vi. Minimum Number of Adults

The definitions of each parameter are as described above under booking conditions. As the searching algorithm analyses the conditions sequentially, it may be possible that at one or more points during the search analysis, one of the conditions is not satisfied. For example, there are no travel products 302 in a certain city or region; the travel dates are within the close-out dates of the travel products 302; or the number of adults travelling does not meet the required number of adults. In such cases, the user will be prompted to re-input a new or revised parameter. Upon receiving the revised parameters, the searching algorithm continues to search for travel products 302 that are relevant to the user.

If all the conditions are satisfied by the user parameters, the searching algorithm will search promotional or discounted or preferential travel products 302 based on the aforementioned Promotion Manager system and Rate Manager system. Thus, travel products 302 with promotional packages, and travel products 302 with preferential rates, such as those associated with the ages of the people travelling as described above, will be presented to the user according to step 110 of the method 100. The user has the discretion to review the presented travel products 302 and decide whether to choose them as selected service items 300 to be populated into his travel itinerary 200 according to steps 120 and 130 of the method 100.

FIG. 3 shows another screen capture of a travel itinerary 200 in a calendar format, wherein the travel itinerary 200 has been populated with some selected service items or travel products 300. The travel itinerary 200 shows a timeline 202 extending between a starting date 204 (20 April 2014) and an ending date 206 (25 April 2014). The timeline 202 is separated into a plurality of time frames 208 arranged in chronological order, wherein each time frame 208 represents to a date within the timeline 202. Each time frame or date 208 defines a time range 210, i.e. from 0000 hours to 2359 hours of the respective date 208. In FIG. 3, the travel itinerary 200 is too long to be displayed in its entirety; only a portion of the timeline 202 is shown. For the portion of the timeline 202 shown, each time frame or date 208 has been

populated with a selected travel product 300. New or additional travel products 302 can be added using the add function 232. Each selected travel product 300 includes a short description 314 about it that is shown on the travel itinerary 200. If a selected travel product 300 comprises a plurality of sub-products, the descriptions 314 of each sub-product is also shown so as to inform the user of the activities to be expected.

By inputting user-specific parameters and browsing for travel products or reference service items 302, a user can choose his preferred travel products as selected service items 300 and populate them into his travel itinerary 200, thereby designing, customizing, and personalizing his travel itinerary 200. As described above, some of the travel products 302 can be bookmarked and saved for future reference. Preferred or bookmarked travel products 302 can be dragged and dropped into the respective dates or time frames 208 of the timeline 202 of the travel itinerary in order to confirm them as selected service items 300. The dragging and dropping of the travel products or reference service items 302 is performed by way of a computer input device such as a mouse or touchpad.

When the user decides to finalize or confirm the selected service items 300 in his travel itinerary 200, the selected service items 300 can be purchased online using the computing device. The various modes of online payment will be readily known to a skilled person. The back-end server will perform the payment authentication, such as to check the availability of funds and/or the authenticity of credit cards. Upon confirmation of payment, the back-end server will generate and send an official payment receipt to the user, as a form of verification that the selected service items 300 have been duly purchased. Likewise, the back-end server will inform the vendors who are providing the selected service items 300 that the user has successfully completed the purchase and the vendors should uphold their end of the transaction. Upon confirmation by the vendors, the back-end server will generate and send a travel voucher to the user, as a form of confirmation of the purchased service items 300.

When making payment to purchase the selected travel products 300, the travel vendors or merchants may impose tariff conditions to users. These tariff conditions may include rates that depend on the number of people combination, the currency being used for the payment, and/or a mark-up of the prices by a predetermined percentage or amount.

In the method 100, the user can also create and save multiple travel itineraries 200, such as for contingency plans or for multiple vacation trips. The travel itineraries 200 are saved on the back-end server for subsequent retrieval by the user. Additionally, the user can share their travel itineraries 200 with other users who are also using the method 100 on their own computing devices. Thus, other users can access a particular travel itinerary 200 as a reference, likely as some sort of travel guidelines to assist travellers who are visiting a new country. The environment wherein users share their travel itineraries 200 with one another is known as a travel studio.

A user can create a private group (or private Studio) for sharing his travel itinerary 200 with other users who are invited to join the private Studio. Users can only join as members of the private Studio by invitation only. The user can also create a public group (or public Studio) and share his travel itinerary 200 with other users of the method 100. Users can join as members of the public Studio on their own volition without invitation. The creator of the Studio is known as the Producer.

The Producer can nominate members of the Studio to be Screenwriters, who have the authority to make changes to the selected travel products 300 populated in a travel itinerary 200. However, the Screenwriters do not have the authority to make changes to the duration (e.g. timeline 202, starting date 204, and/or ending date 206) of the travel itinerary 200. The selected travel products 300 are known as Script and the travel itinerary 200 is known as Screenplay. The Producer can also invite members in the Studio to view the Script but without the authority to make changes. These members are known as Artistes.

The Producer can share his travel itinerary 200 or Screenplay with other members of the Studio, who are known as Audience. Only Audience members have the authority

to vote on the Screenplay. Screenwriters and Artistes cannot vote on the Screenplay. Based on the number of votes, Screenplays with more than a predetermined number of votes are regarded as widely accepted, and incentives will be rewarded to the Producers of such Screenplays. Thus, this advantageously incentivizes users to put in effort to design travel itineraries 200. Moreover, if some of the Audience members have a strong interest in a particular Screenplay, he can purchase the rights to access the Screenplay. The purchasing of the rights to access the Screenplay is similar and/or analogous to that for purchasing the selected travel products 300. With every purchase of the rights to access a Screenplay, the Producer of the Screenplay earns incentives or commissions. These incentives earned by or rewarded to the Producers can be used by the Producers to redeem other travel products 302, or even to exchange for cash rewards.

In various embodiments of the present disclosure, the method 100 may be implemented using a mobile application executed or running on a mobile device, such as a smartphone or a tablet device.

FIG. 4A to FIG. 4C show screen captures from a mobile device of a travel itinerary 200 being planned using the method 100. With the create function 226 in FIG. 4A, a user is able to create or plan a new travel itinerary 200 for overseas trips. The user inputs a country, city, or region for the destination 212 of the travel trip. The user also inputs the starting date 204 and the ending date 206 of the travel itinerary 200. Based on the starting date 204 and the ending date 206, the method 100 will automatically generate a timeline 202 of the travel itinerary 200. Additionally, the user inputs the number of people 214 who are travelling together on the same trip. Specifically, the user inputs the number of adults 214a and the number of children 214b. The definitions of the age ranges of an adult and a child would be made known to the user on the user interface of the mobile device. For convenience, the user can also input an itinerary name 236 for this particular travel itinerary 200, so as to be able to identify and sort out multiple travel itineraries 200 in future.

FIG. 4B shows a screen capture of the travel itinerary 200 in a calendar format, and FIG. 4C shows a screen capture of the travel itinerary 200 in a list format. The format

of the travel itinerary 200 is interchangeable using the calendar function 218 (for calendar format) and the summary function 220 (for list format). In the calendar format, the plurality of time frames 208 of the timeline 202 of the travel itinerary 200 are arranged or presented on the user interface of the mobile device as columnar segments arranged in rows. In the list format, the plurality of time frames 208 are arranged or presented as columnar segments arranged in columns.

As shown in FIG. 4B and FIG. 4C, the plurality of time frames 208 are arranged in a calendar format and list format, respectively, wherein each of the columnar segments terminates with an accommodating segment 238. The accommodating segments 238 are populated with an accommodation service, such as selected travel products 300 from the Stay category 308. These accommodation services may include hotels, hostels, and the like. The accommodating segments 238 are separated from the main product segments 240 to as to separate the adding of accommodation products from the other product types. The reasoning for this is due in part to the thinking that consumers would normally only stay in one hotel for any single day and do not need to change the order of additional booked accommodation services. In some situations, especially when travelling with groups of people, some might want to stay at a different hotel or have to stay at another hotel due to capacity issues. It is thus advantageous to separate the accommodation segments 238 from the main product segments 240 as the main product segments 240 or activity area can be kept clear for other sightseeing and travel items, thereby avoiding the cluttering of a time frame 208 with both activity travel products and accommodation services. This further advantageously provides the user with a clearer picture of the entire travel itinerary 200.

New service items from the plurality of reference service items 302 can be selected and added to each of the plurality of time frames 208, by using the add functions 232. Thus, the selection of one or more than one of the reference service items 302 forms the selected service items 300 which are then populated into the respective time frames 208. The selected service items or travel products 300 can be added into any particular time frame or date 208 on the timeline 202. Further, they can be added into either the accommodation segments 238 or the main product segments 240.

The method 100 may restrict the accommodation segments 238 or the main product segments 240 to receive only certain types of selected service items 300. For example, travel products 302 under the Stay & Play category 306 and the Play category 310 can only be added into the main product segments 240. Likewise, travel products 302 under the Stay category 308 can only be added into the accommodation segments 238. If the user is dragging and dropping (such as when using a computing device instead) the selected travel products 300 into the time frame 208, the time frame 208 (or either the accommodation segment 238 or the main product segment 240) will display or highlight a “drop here” notice. The notice informs or prompts the user to drop the selected travel products 300 into a designated area, as the other areas would not be able to accept the selected travel products 300.

Each of the selected service items or travel products 300 has a time limit 304. The selected travel products 300 are presented on each of the time frames 208 relative to the timeline 202, i.e. depending on the dates of the selected travel products 300. Additionally, the selected travel products 300 are presented based on the time limit 304 of at least one of the selected travel products 300. For example, if a first selected travel product 300a has a time limit 304 of 0900 hours, and a second selected travel product 300b has a time limit 304 of 1100 hours, the second selected travel product 300b will be automatically placed after the first selected travel product 300a, within the time range 210 of the time frame 208. Thus, the method 100 arranges the selected travel products 300 in chronological order, within each time frame 208 and within the entire timeline 202.

Further, the method 100 determines whether there is any conflict of the time limits 304 of the selected service items 300 from the plurality of reference service items 302 with the time range 210 of the one of the plurality of time frames 208 to be populated. For example, if there is conflict between the time limit 304 of a second selected travel product 300b with a first selected travel product 300a or the time range 210, the method 100 notifies the user and does not allow the second selected

travel product 300b to be added. This prevents the user from having selected travel products 300 that conflict or clash with each other, and also prevents the user from adding too many selected travel products 300 that go beyond the time range 210 of a particular time frame or date 208.

In the travel itinerary 200, each selected travel product 300 is displayed with its corresponding description 314, informing the user of the activities associated with the travel products 300. For example, the description 314 may indicate the specific time for an event, such as for day tours, theatre shows, and transport timings. As there may be multiple selected travel products 300 belonging to various categories (306, 308, 310, and 312), each product type or category may be denoted with a colour code to help notify the user of the different travel product types or categories. Additionally or alternatively, the types or categories may be differentiated or distinguished with stylized designs such as strips and patterns.

The user can select from the plurality of reference service items 302 that are sorted in at least four categories – Stay & Play category 306, Stay category 308, Play category 310, and Go category 312. FIG. 5A shows a screen capture of the user browsing travel products 302 from the Stay & Play category 306. FIG. 5B shows a screen capture of the user browsing travel products 302 from the Stay category 308. FIG. 5C shows a screen capture of the user browsing travel products 302 from the Play category 310. FIG. 5D shows a screen capture of the user browsing travel products 302 from the Go category 312. Referring to FIG. 5A to FIG. 5D in general, the user searches for travel products 302 by inputting user parameters, has described above. The user can view the respective descriptions 314 of each travel product 302. Some travel products 302 may offer promotional rates or discounts, as described above. The user can also sort the search results using the predetermined filters 316. In some situations, the user may not prefer to view the search results in a list format as shown in FIG. 5A to FIG. 5D; the user may prefer to view the search results in a map format. The map format provides an advantage to the user in that the user can search for travel products 302 located in close proximity to one another, or located near to his accommodation.

If the user finds a travel product 302 that is interesting, he can save or bookmark the travel product 302 using the bookmark function 234. The bookmark function 234 is as shown in FIG. 6. Moreover, the user can sort the bookmarked travel products 302 into various categories for convenience of subsequent retrieval. The bookmarked travel products 302 can subsequently be populated into the travel itinerary 200, without having the user go through the searching process all over again.

After the user has finalized his travel itinerary 200 with the populated selected travel products 300, the user may purchase the selected travel products 300. The selected travel products 300 may first be added to a shopping cart using the booking function 242. FIG. 7A shows a screen capture of the shopping cart or checkout page 244 on the user interface of the mobile device. In the checkout page 244, the prices of each selected travel product 300 is shown next to it. In some situations, the prices can only serve as a guideline for the user, as the pricing is only accurate at the time of selection, i.e. when adding the travel product 300 into the travel itinerary 200. Nevertheless, based on the displayed prices, the user is able to get an accurate sense of the cost and availability of the selected travel products 300.

The user can proceed to make payment for the selected travel products 300 at the checkout page 244. There is thus a centralized system at the back-end server that allows the user to purchase all of the selected travel products 300 in a single payment process. After completion of the payment process, a confirmation booking page 246 is displayed on the user interface of the mobile device, as shown in FIG. 7B. In the confirmation booking page 246, the user is able to view his purchased travel products 300, their respective descriptions 314, and the amount of money paid for each of the travel products 300. Additionally, a transaction reference 248 (e.g. transaction number and/or booking identification number) is displayed as confirmation of the purchase, which the user can save for records purposes.

In the payment process, the back-end server will perform the payment authentication, such as to check the availability of funds and/or the authenticity of credit cards. Upon confirmation of payment, the back-end server will generate and send an official payment receipt to the user, shown in the confirmation booking page 246, as a form

of verification that the selected travel products 300 have been duly purchased. Likewise, the back-end server will inform the vendors or merchants who are providing the selected travel products 300 that the user has successfully completed the purchase. Upon confirmation by the vendors or merchants, the back-end server will generate and send a travel voucher to the user, as a form of confirmation of the purchased travel products 300. An example of a travel voucher for a purchased travel product 300 is shown in the voucher page 250 in FIG. 7C. The travel voucher indicates a voucher reference 252 and key particulars 254 of the purchased travel product 300, such as dates, names, and number of people.

FIG. 8 shows a screen capture of the user's "my bookings" page 256 that is accessible by the user using the "my bookings" function 258. The "my bookings" page 256 shows the history of all the bookings made by the user, and includes details such as itinerary names 236, status of the bookings, and the prices of the bookings. If there are too many bookings to be displayed on a single page, the "my bookings" page 256 is paginated (260) for allowing the user to scroll back and forth his travel bookings.

Referring back to FIG. 4B, within the timeline 202 of the travel itinerary 200, the selected travel products 300 are arranged in their respective time frames 208. In some situations, such as when the user has a change of mind, the user can move around the populated travel products 300 among the plurality of time frames 208. Thus, the user can move a particular travel product 300 from one time frame or date 208 to another time frame or date 208, such as to the next day. Or in other words, the dates of any selected travel products 300 can be changed by the user even after they have been populated into the travel itinerary 200. However, if the selected travel products 300 have already been booked and purchased, the date is already fixed and cannot be changed. The moving of selected travel products 300 can only be done if they have not been booked.

Additionally or alternatively, the user can change the duration of the timeline 202 of the travel itinerary 200. The user can do so by changing either the starting date 204 or the ending date 206. If the changing of the timeline 202 affects the dates of the

selected travel products 300, the selected travel products 300 will move accordingly so as to still remain in the travel itinerary 200. For example, if the timeline 202 is pushed back by one day, e.g. the starting date 204 or the ending date 206 is changed to one day later, the already populated travel products 300 will be pushed back by one day. Or if the changed timeline 202 is shorter than the previous one, such that the already populated travel products 300 cannot all fit into the changed timeline 202, an alert may be prompted to the user to notify him that some of the selected travel products 300 must be removed or changed. Therefore, the correlation of the populating of travel products 300 in the travel itinerary 200 with changes to the timeline 202 advantageously allows the travel itinerary 200 to automatically adjust itself based on changes made by the user.

In the foregoing detailed description, embodiments of the present disclosure in relation to a method for planning a travel itinerary are described with reference to the figures. Description of the various embodiments in the detailed description is not intended to callout specific or particular representations of the present disclosure, but merely to illustrate non-limiting examples of the present disclosure. For example, the method described in the present disclosure may be used for planning local staycations instead of overseas holidays. Further, the method may also be used as a centralized planning system for other products associated with the travel industry. The method may even be extended for use in other service industries beyond travel service, as will be readily known and understood by a person having ordinary skill in the art.

The present disclosure serves to address at least some of the mentioned problems and issues associated with the prior art. Although only some embodiments of the present disclosure are disclosed herein, it will be apparent to a person having ordinary skill in the art in view of this disclosure that numerous changes and/or modifications can be made to the disclosed embodiments without departing from the scope of the present disclosure. The scope of the disclosure as well as the scope of the following claims is not limited to embodiments described herein.

Claims

1. A method for planning a travel itinerary, the method comprising:

presenting at least a portion of a timeline of the travel itinerary on a user interface (UI) of a computing device, the timeline extending between a first date and a second date, the timeline being segmented into a plurality of time frames arranged in chronological order, each of the plurality of time frames defining a time range; and

enabling populating of each of the plurality of time frames with at least one selected service item, the at least one selected service item being selected from a plurality of reference service items,

wherein each of the plurality of reference service items has a time limit, the time limits of each of the at least one selected service item populating each of the plurality of time frames corresponding with the time range thereof.

2. The method as in claim 1, wherein the plurality of reference service items comprises at least one of tour services, transportation services, accommodation services, and activity services.

3. The method as in claim 1, further comprising:

presenting the at least one selected service item on each of the plurality of time frames relative to the timeline based on the time limits of the at least one selected service item.

4. The method as in claim 1, wherein enabling populating of each of the plurality of time frames with at least one selected service item comprises:

enabling selection of one of the plurality of reference service items in relation to one of the plurality of time frames to be populated; and

determining conflict of the time limits of the selected one of the plurality of reference service items with the time range of the one of the plurality of time frames to be populated.

5. The method as in claim 1, wherein enabling populating of each of the plurality of time frames with at least one selected service item comprises:

enabling selection of more than one of the plurality of reference service items corresponding to one of the plurality of time frames to be populated; and

determining conflict between the time limits of the selected more than one of the plurality of reference service items corresponding to the one of the plurality of time frames to be populated.

6. The method as in claim 1, wherein each time frame corresponds with one of a plurality of dates extending from the first date to the second date.

7. The method as in claim 6, wherein the plurality of time frames are presented on the UI as columnar segments arranged in rows.

8. The method as in claim 7, each of the columnar segments terminating with an accommodating segment for populating with an accommodation service.

9. The method as in claim 1, further comprising:

enabling booking of each of the at least one selected service item.

10. The method as in claim 9, further comprising:

generating a confirmation voucher for each of the booked service item.