SYSTEM AND METHOD FOR FACILITATING PAYMENT OF BILLS

FIELD OF INVENTION

[001] The present invention relates broadly, but not exclusively, to systems and methods for facilitating payment of bills.

BACKGROUND

[002] Currently, credit cardholders can pay a credit card bill by electronically transferring funds to an issuer of the credit card. For example, if the cardholder has an account with the issuer, he/she can login to an electronic banking platform to make the payment via an electronic fund transfer. However, the cardholder has to be aware of the outstanding amount of the credit card bill. Further, the cardholder may not receive an immediate confirmation of payment receipt from the issuer. Rather, the cardholder has to rely on the confirmation of fund transfer as the initial proof of payment.

[003] Figure 1 shows a flow chart 100 illustrating an existing method of paying a credit card bill by electronic fund transfer using an electronic online banking platform. For illustrative purposes, the existing method that is described is based on the current practice in India. In India, National Electronic Funds Transfer (NEFT) is an electronic funds transfer system maintained by the Reserve Bank of India (RBI). NEFT is a facility enabling bank customers in India to transfer funds between any two NEFT-enabled bank accounts on a one-to-one basis.

[004] At step 102, a consumer logs in to the electronic online banking platform and adds the credit card issuer as a payment beneficiary. Subsequently, at step 104, when the consumer wishes to pay his outstanding credit card bill, he selects the credit card issuer, enters the amount to be paid and proceeds with the fund transfer.

[005] At step 106, the originating bank prepares a Structured Financial Messaging Solution (SFMS) message and sends the message to a NEFT Service Centre. The SFMS message contains a batch of NEFT payments. The NEFT Service Centre is a branch in a bank which is responsible for processing, sending and/or receiving NEFT SFMS messages. The list of transactions is sent to the NEFT Clearing Centre at the end of a day. At step 108, the NEFT Service Centre sends the SFMS message to a NEFT Clearing Centre which is included in a next available batch.

[006] At step 110, the NEFT Clearing Centre groups the transactions bank-wise and prepares bank-wise remittances and forwards to the NEFT Service Centre of the respective banks. Typically, the NEFT Clearing Centre sends the remittance advice to the respective banks in a next settlement cycle.

[007] At step 112, the credit card issuer receives the remittance messages and updates the cardholder's credit card statement of account. The statement is usually updated after at least two days and the credit limit of the cardholder's account is increased. Due to this delay, there are high chances of late fees being imposed if the cardholder makes payment on the payment deadline or a day before the deadline.

[008] The bill payment is not reflected as being paid in the cardholder's statement of account in real-time or at least on the same day because the relevant payment data does not reach the issuer on the same day; instead the relevant payment data reaches the issuer after 24 hours because of the standard practice of consolidated clearing. As a result, it typically takes about two to three days for the bill payment to be reflected in the cardholder's statement of account.

[009] If the cardholder does not have an account with the issuer, it is even more cumbersome to pay a credit card bill. For example, the cardholder has to write a cheque and drop the cheque into a cheque drop box of the issuer bank or physically go to the issuer bank and make payment.

[0010] A need therefore exists to provide systems and methods for facilitating payment of bills that seek to address at least some of the above problems.

SUMMARY

[0011] According to a first aspect, there is provided a system for facilitating payment of a bill, including an issuer module that is in communication with a digital

wallet module, wherein the issuer module is configured to: receive, from the digital wallet module, data including: card details corresponding to a payment card having an outstanding bill; and a payment amount corresponding to the outstanding bill; and update an account record associated with the payment card to reflect the payment amount corresponding to the outstanding bill, wherein the account record is updated in real-time without delay after the data including the card details and the payment amount are received at the issuer module.

[0012] According to a second aspect, there is provided a method for facilitating payment of a bill, including: transmitting, from a digital wallet module to an issuer module, data including: card details corresponding to a payment card having an outstanding bill; and a payment amount corresponding to the outstanding bill; and updating, at the issuer module: an account record associated with the payment card to reflect the payment amount corresponding to the outstanding bill, wherein the account record is updated in real-time without delay after the data including the card details and the payment amount are received at the issuer module.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] Embodiments and implementations are provided by way of example only, and will be better understood and readily apparent to one of ordinary skill in the art from the following written description, read in conjunction with the drawings, in which:

[0014] Figure 1 shows a flow chart illustrating an existing method of paying a credit card bill by electronic fund transfer using an electronic online banking platform;

[0015] Figure 2 shows a flow chart illustrating a method of paying a credit card bill, according to an example embodiment;

[0016] Figure 3 shows a flow chart illustrating a method for facilitating payment of bills, according to an example embodiment;

[0017] Figure 4 shows a schematic diagram of a system for facilitating payment of bills, according to an example embodiment; and

[0018] Figure 5 shows a schematic diagram of a computer system suitable for use in executing one or more steps of the method for facilitating payment of bills according to example embodiments.

DETAILED DESCRIPTION

[0019] Embodiments will be described, by way of example only, with reference to the drawings. Like reference numerals and characters in the drawings refer to like elements or equivalents.

[0020] Some portions of the description which follows are explicitly or implicitly presented in terms of algorithms and functional or symbolic representations of operations on data within a computer memory. These algorithmic descriptions and functional or symbolic representations are the means used by those skilled in the data processing arts to convey most effectively the substance of their work to others skilled in the art. An algorithm is here, and generally, conceived to be a self-consistent sequence of steps leading to a desired result. The steps are those requiring physical manipulations of physical quantities, such as electrical, magnetic or optical signals capable of being stored, transferred, combined, compared, and otherwise manipulated.

[0021] Unless specifically stated otherwise, and as apparent from the following, it will be appreciated that throughout the present specification, discussions utilizing terms such as “receiving”, “scanning”, “calculating”, “determining”, “replacing”, “generating”, “initializing”, “outputting”, or the like, refer to the action and processes of a computer system, or similar electronic device, that manipulates and transforms data represented as physical quantities within the computer system into other data similarly represented as physical quantities within the computer system or other information storage, transmission or display devices.

[0022] The present specification also discloses apparatus for performing the operations of the methods. Such apparatus may be specially constructed for the required purposes, or may comprise a computer or other device selectively activated or reconfigured by a computer program stored in the computer. The algorithms and displays presented herein are not inherently related to any particular computer or other apparatus. Various machines may be used with programs in accordance with the teachings herein. Alternatively, the construction of more specialized apparatus to

perform the required method steps may be appropriate. The structure of a computer suitable for executing the various methods / processes described herein will appear from the description below.

[0023] In addition, the present specification also implicitly discloses a computer program, in that it would be apparent to the person skilled in the art that the individual steps of the method described herein may be put into effect by computer code. The computer program is not intended to be limited to any particular programming language and implementation thereof. It will be appreciated that a variety of programming languages and coding thereof may be used to implement the teachings of the disclosure contained herein. Moreover, the computer program is not intended to be limited to any particular control flow. There are many other variants of the computer program, which can use different control flows without departing from the spirit or scope of the invention.

[0024] Furthermore, one or more of the steps of the computer program may be performed in parallel rather than sequentially. Such a computer program may be stored on any computer readable medium. The computer readable medium may include storage devices such as magnetic or optical disks, memory chips, or other storage devices suitable for interfacing with a computer. The computer readable medium may also include a hard-wired medium such as exemplified in the Internet system, or wireless medium such as exemplified in the GSM mobile telephone system. The computer program when loaded and executed on such a computer effectively results in an apparatus that implements the steps of the preferred method.

[0025] In the following description, depending on the context, the term “module” can refer to software, a hardware element, or a combination of both.

[0026] In the following description, a “digital wallet” refers to software and/or hardware elements that allow a consumer to make electronic transactions. This can include purchasing items using a mobile device (e.g. smartphone) with a digital wallet application installed thereon. The consumer’s bank account can be linked to the digital wallet. Typically, digital wallets are stored on the consumer side.

[0027] An Application Programming Interface (API) enables software and applications to communicate with each other. It is a software-to-software interface that allows for separate parties to communicate with each other without any previous user knowledge or intervention. In general terms, it is a set of clearly defined methods of

communication between various software components.

[0028] Embodiments relate to systems and methods for facilitating payment of bills, especially credit card bills. In particular, embodiments enable customers to pay their credit card bills using a digital wallet application (such Masterpass™ by MasterCard®). Specifically, to make payment, the customer (who has an existing digital wallet account) first adds a debit card from any participating bank. The debit card account is a source of funds for payment of the credit card bills. Thereafter, the customer selects the credit card having an outstanding bill. The digital wallet application can reflect the outstanding bill amount. In contrast, the existing National Electronic Funds Transfer (NEFT) method of paying a credit card bill does not provide the customer with an indication of the outstanding amount of the credit card bill.

[0029] The customer indicates that the amount of funds that are to be deducted from the debit card account to pay the bill. If necessary, authentication and security mechanisms (e.g. 3-D Secure) may be implemented before the funds are deducted to pay the bill. If payment is successful, the credit card statement reflects the paid amount in real-time via an API call. If partial payment of the outstanding bill is made, the digital wallet application can reflect the remaining outstanding amount. Updating the credit card statement in real-time can help cardholders avoid incurring late fees due to last minute payments.

[0030] In contrast to the existing method of paying a credit card bill (as illustrated in Figure 1), embodiments seek to update both the accounts of the credit card issuer and customer's bank (i.e. the bank that issued the debit card) in real-time. However, the mechanism in which funds reach the credit card issuer and customer's bank remain the same as the current practice.

[0031] In an exemplary embodiment, a statement API call is initiated by a digital wallet application to a credit card issuer module. The digital wallet application transmits credit card information to the credit card issuer module in order to obtain the latest billed statement from the credit card issuer. The statement includes, but is not limited to, total outstanding amount, currency of outstanding amount, and item details (e.g. item name, amount, currency, merchant, date of purchase, etc.).

[0032] In addition, a statement update API is exposed by the credit card issuer module for the digital wallet application. The digital wallet application can send payment and credit card details to the issuer bank to update the records. The issuer bank updates

the records of the customer and reflects the payment amount, thereby increasing the credit limit in real-time. At the same time, the issuer bank sends a notification to the customer that payment has been received. However, the issuer bank has to wait for a day's time to obtain the clearing file for the fund movement.

[0033] Figure 2 shows a flow chart 200 illustrating a method of paying a credit card bill, according to an example embodiment. At step 202, a consumer logs in to his/her digital wallet application and adds a debit card from any participating bank. The debit card account is a source of funds for payment of credit card bills. The consumer also adds one or more credit card issuers as payment beneficiary.

[0034] Thereafter, at step 204, when the consumer wishes to pay an outstanding credit card bill, he selects the appropriate credit card issuer, enters the amount to be paid and proceeds with the payment.

[0035] At step 206, the digital wallet application calls the API of the credit card issuer module. Specifically, the digital wallet application prepares an outbound open API call to the credit card issuer. The API call/request includes one or more of: credit card number (encrypted), payment amount, timestamp, and transaction remarks. The corresponding API response from the credit card issuer module includes a response code and/or response description.

[0036] As a pre-requisite, the credit card issuer module has to create a Certificate Signing Request (CSR) file to decrypt the API call/request and encrypt the corresponding API response. Further, the API solution is built as prescribed by the digital wallet application. At step 208, the credit card issuer module implements the API call/request to update the cardholder's statement of account to reflect the payment amount. In this manner, the cardholder's credit limit can be increased in real-time corresponding to the payment amount.

[0037] For illustrative purposes, the exemplary method that is described is based on the practice in India. In India, National Electronic Funds Transfer (NEFT) is an electronic funds transfer system maintained by the Reserve Bank of India (RBI). NEFT is a facility enabling bank customers in India to transfer funds between any two NEFT-enabled bank accounts on a one-to-one basis. At step 210, the digital wallet application receives a successful update from the credit card issuer module and prepares a Structured Financial Messaging Solution (SFMS) message and sends the message to a NEFT Clearing Centre at the end of a day. In contrast to the existing

method (as illustrated in Figure 1), the digital wallet application does not wait for the end of a day batch to send the SFMS message; rather the digital wallet application sends the SFMS message in real time.

[0038] At step 212, the NEFT Clearing Centre groups the transactions bank-wise and prepares bank-wise remittances and forwards to the NEFT Service Centre of the respective banks. The NEFT Service Centre is a branch in a bank which is responsible for processing, sending and/or receiving NEFT SFMS messages. The NEFT Clearing Centre sends the remittance advice to the respective banks in a next settlement cycle.

[0039] At step 214, the credit card issuer receives the remittance messages. Importantly, the cardholder's statement of account is updated in real-time but the bank only receives the funds after about one day. In this manner, the chances of late fees being imposed if the cardholder makes payment on the payment deadline or a day before the deadline are significantly reduced compared to the existing method of bill payment.

[0040] Figure 3 shows a flow chart illustrating a method 300 for facilitating payment of a bill, according to an example embodiment. In the following example, the bill (i.e. invoice) is a credit card bill. However, a skilled reader will appreciate that embodiments can be applied to other types of bills (e.g. utility bills, cellular phone bills, etc.).

[0041] At step 302, data that includes (i) card details corresponding to a payment card (i.e. credit card) having an outstanding bill, and (ii) a payment amount corresponding to the outstanding bill, is transmitted from a digital wallet module to an issuer module.

[0042] At step 304, the issuer module updates an account record associated with the payment card to reflect the payment amount corresponding to the outstanding bill. The account record is updated in real-time without delay after the data including (i) the card details and (ii) the payment amount are received at the issuer module.

[0043] In an implementation, functions of the issuer module are exposed via an application programming interface (API). The digital wallet module can initiate an API call such that the data including (i) the card details and (ii) the payment amount is transmitted from the digital wallet module to the issuer module, in accordance with step 302. The issuer module can implement the API call such that the account record

associated with the payment card can be updated to reflect the payment amount corresponding to the outstanding bill, in accordance with step 304.

[0044] After step 304, the issuer module can initiate an API response that includes an indication of receipt of the payment amount, on a condition that the account record is successfully updated.

[0045] Optionally, prior to step 302, the method 300 can include step 301a of transmitting, from the digital wallet module to the issuer module, additional data that includes: (i) card details corresponding to the payment card, and (ii) a request for information corresponding to the outstanding bill.

[0046] Subsequent to step 301a, the method 300 can include step 301b of transmitting, from the issuer module to the digital wallet module, information corresponding to the outstanding bill in response to the request. The information corresponding to the outstanding bill can include at least one of: the payment amount corresponding to the outstanding bill, a currency of the payment amount, and details of one or more purchased products.

[0047] In an implementation, the digital wallet module can initiate an initial API call such that the additional data including (i) the card details and (ii) the request for information can be transmitted from the digital wallet module to the issuer module, in accordance with step 301a. The issuer module can implement the initial API call such that the information corresponding to the outstanding bill can be retrieved from an issuer database. The issuer module can also initiate an initial API response that includes the retrieved information corresponding to the outstanding bill, in accordance with step 301b.

[0048] Subsequent to step 304, the method 300 can include step 306 of transmitting a secure financial message from the digital wallet module to a clearing centre module on a condition that the account record has been successfully updated. The secure financial message is preferably transmitted without delay after receipt of the API response by the digital wallet module. The secure financial message includes: (i) the data comprising the payment amount corresponding to the outstanding bill, and (ii) at least one of: an identity of a payer of the payment amount and a number of the payer's bank account from which the payment amount is to be deducted.

[0049] Subsequent to step 306, the method 300 can include step 308 of transmitting a consolidated remittance message from the clearing centre module to the issuer module. The consolidated remittance message is transmitted at a close of a settlement cycle and the consolidated remittance message is based on at least the secure financial message.

[0050] Figure 4 shows a schematic of a system 400 for facilitating payment of a bill, according to an example embodiment. The system 400 includes an issuer module 402 that is in communication with a digital wallet module 404. The issuer module 402 is configured to receive, from the digital wallet module 404, data including: (i) card details corresponding to a payment card having an outstanding bill; and (ii) a payment amount corresponding to the outstanding bill. The issuer module 402 is also configured to update an account record associated with the payment card to reflect the payment amount corresponding to the outstanding bill. The account record is updated in real-time without delay after the data comprising the card details and the payment amount is received at the issuer module 402.

[0051] In an implementation, functions of the issuer module 402 are exposed via an application programming interface (API). In this manner, the digital wallet module 404 is configured to initiate an API call such that the data including the card details and the payment amount can be transmitted from the digital wallet module 404 to the issuer module 402. The issuer module 402 is further configured to implement the API call such that the account record associated with the payment card is updated to reflect the payment amount corresponding to the outstanding bill.

[0052] The issuer module 402 can be further configured to initiate an API response on a condition that the account record is successfully updated. The API response includes an indication of receipt of the payment amount.

[0053] The issuer module 402 can be further configured to receive, from the digital wallet module 404, additional data comprising: (i) card details corresponding to the payment card; and (ii) a request for information corresponding to the outstanding bill. The issuer module 402 can be further configured to transmit, to the digital wallet module 404, information corresponding to the outstanding bill in response to the request. The information corresponding to the outstanding bill includes at least one of: the payment amount corresponding to the outstanding bill, a currency of the payment amount, and details of one or more purchased products.

[0054] The digital wallet module 404 can be further configured to initiate an initial API call such that the additional data comprising the card details and the request for information can be transmitted from the digital wallet module 404 to the issuer module 402. In this regard, the issuer module 402 can be further configured to implement the initial API call such that the information corresponding to the outstanding bill can be retrieved from an issuer database 406 that is in communication with the issuer module 402. The issuer module 402 can be configured to initiate an initial API response that includes the retrieved information corresponding to the outstanding bill.

[0055] The digital wallet module 404 can be in communication with a clearing centre module 408, and the digital wallet module 404 is further configured to transmit a secure financial message to the clearing centre module 408 on a condition that the account record has been successfully updated. The secure financial message is transmitted without delay after receipt of the API response by the digital wallet module 404. The secure financial message includes: (i) the data comprising the payment amount corresponding to the outstanding bill, and (ii) at least one of: an identity of a payer of the payment amount and a number of the payer's bank account from which the payment amount is to be deducted.

[0056] The issuer module 402 can be in communication with the clearing centre module 408, and the issuer module 402 can be further configured to receive a consolidated remittance message from the clearing centre module 408. The consolidated remittance message is transmitted from the clearing centre module 408 at a close of a settlement cycle, and the consolidated remittance message is based on at least the secure financial message.

[0057] Figure 5 shows a schematic diagram of a computer device / system 500 suitable for use in executing one or more steps of the above-described methods for facilitating payment of a bill. One or more such computing devices 500 may be used to execute the above-described methods for facilitating payment of a bill. In addition, one or more components of the computer system 500 may be used to realize the system 400, issuer module 402, digital wallet module 404 and/or clearing centre module 408. The following description of the computing device 500 is provided by way of example only and is not intended to be limiting.

[0058] As shown in Figure 5, the example computing device 500 includes a processor 504 for executing software routines. Although a single processor is shown for the sake of clarity, the computing device 500 may also include a multi-processor system. The

processor 504 is connected to a communication infrastructure 506 for communication with other components of the computing device 500. The communication infrastructure 506 may include, for example, a communications bus, cross-bar, or network.

[0059] The computing device 500 further includes a main memory 508, such as a random access memory (RAM), and a secondary memory 510. The secondary memory 510 may include, for example, a hard disk drive 512 and/or a removable storage drive 514, which may include a magnetic tape drive, an optical disk drive, or the like. The removable storage drive 514 reads from and/or writes to a removable storage unit 518 in a well-known manner. The removable storage unit 518 may include a magnetic tape, optical disk, or the like, which is read by and written to by removable storage drive 514. As will be appreciated by persons skilled in the relevant art(s), the removable storage unit 518 includes a computer readable storage medium having stored therein computer executable program code instructions and/or data.

[0060] In an alternative implementation, the secondary memory 510 may additionally or alternatively include other similar means for allowing computer programs or other instructions to be loaded into the computing device 500. Such means can include, for example, a removable storage unit 522 and an interface 520. Examples of a removable storage unit 522 and interface 520 include a program cartridge and cartridge interface (such as that found in video game console devices), a removable memory chip (such as an EPROM or PROM) and associated socket, and other removable storage units 522 and interfaces 520 which allow software and data to be transferred from the removable storage unit 522 to the computer system 500.

[0061] The computing device 500 also includes at least one communication interface 524. The communication interface 524 allows software and data to be transferred between computing device 500 and external devices via a communication path 526. In various embodiments of the inventions, the communication interface 524 permits data to be transferred between the computing device 500 and a data communication network, such as a public data or private data communication network. The communication interface 524 may be used to exchange data between different computing devices 500 which such computing devices 500 form part an interconnected computer network. Examples of a communication interface 524 can include a modem, a network interface (such as an Ethernet card), a communication port, an antenna with associated circuitry and the like. The communication interface 524 may be wired or may be wireless. Software and data transferred via the communication interface 524 are in the form of signals which can be electronic, electromagnetic, optical or other

signals capable of being received by communication interface 524. These signals are provided to the communication interface via the communication path 526.

[0062] As shown in Figure 5, the computing device 500 further includes a display interface 502 which performs operations for rendering images to an associated display 530 and an audio interface 532 for performing operations for playing audio content via associated speaker(s) 534.

[0063] As used herein, the term "computer program product" may refer, in part, to removable storage unit 518, removable storage unit 522, a hard disk installed in hard disk drive 512, or a carrier wave carrying software over communication path 526 (wireless link or cable) to communication interface 524. Computer readable storage media refers to any non-transitory tangible storage medium that provides recorded instructions and/or data to the computing device 500 for execution and/or processing. Examples of such storage media include floppy disks, magnetic tape, CD-ROM, DVD, Blu-ray™ Disc, a hard disk drive, a ROM or integrated circuit, USB memory, a magneto-optical disk, or a computer readable card such as a PCMCIA card and the like, whether or not such devices are internal or external of the computing device 500. Examples of transitory or non-tangible computer readable transmission media that may also participate in the provision of software, application programs, instructions and/or data to the computing device 500 include radio or infra-red transmission channels as well as a network connection to another computer or networked device, and the Internet or Intranets including e-mail transmissions and information recorded on Websites and the like.

[0064] The computer programs (also called computer program code) are stored in main memory 508 and/or secondary memory 510. Computer programs can also be received via the communication interface 524. Such computer programs, when executed, enable the computing device 500 to perform one or more features of embodiments discussed herein. In various embodiments, the computer programs, when executed, enable the processor 504 to perform features of the above-described embodiments. Accordingly, such computer programs represent controllers of the computer system 500.

[0065] Software may be stored in a computer program product and loaded into the computing device 500 using the removable storage drive 514, the hard disk drive 512, or the interface 520. Alternatively, the computer program product may be downloaded

to the computer system 500 over the communications path 526. The software, when executed by the processor 504, causes the computing device 500 to perform functions of embodiments described herein.

[0066] It is to be understood that the embodiment of Figure 5 is presented merely by way of example. Therefore, in some embodiments one or more features of the computing device 500 may be omitted. Also, in some embodiments, one or more features of the computing device 500 may be combined together. Additionally, in some embodiments, one or more features of the computing device 500 may be split into one or more component parts.

[0067] It will be appreciated by a person skilled in the art that numerous variations and/or modifications may be made to the present invention as shown in the specific embodiments without departing from the spirit or scope of the invention as broadly described. The present embodiments are, therefore, to be considered in all respects to be illustrative and not restrictive.

CLAIMS

1. A system for facilitating payment of a bill, comprising an issuer module that is in communication with a digital wallet module, wherein the issuer module is configured to:

receive, from the digital wallet module, data comprising:

card details corresponding to a payment card having an outstanding bill; and

a payment amount corresponding to the outstanding bill; and

update an account record associated with the payment card to reflect the payment amount corresponding to the outstanding bill, wherein the account record is updated in real-time without delay after the data comprising the card details and the payment amount are received at the issuer module.

2. The system as claimed in claim 1, wherein functions of the issuer module are exposed via an application programming interface (API), and wherein:

the digital wallet module is configured to initiate an API call such that the data comprising the card details and the payment amount is transmitted from the digital wallet module to the issuer module, and

the issuer module is further configured to implement the API call such that the account record associated with the payment card is updated to reflect the payment amount corresponding to the outstanding bill.

3. The system as claimed in claim 2, wherein the issuer module is further configured to initiate an API response on a condition that the account record is successfully updated, the API response comprising an indication of receipt of the payment amount.

4. The system as claimed in claim 2 or 3, wherein the issuer module is further configured to:

receive, from the digital wallet module, additional data comprising:

card details corresponding to the payment card; and

a request for information corresponding to the outstanding bill; and

transmit, to the digital wallet module, information corresponding to the outstanding bill in response to the request.

5. The system as claimed in claim 4, wherein:

the digital wallet module is further configured to:

initiate an initial API call such that the additional data comprising the card details and the request for information is transmitted from the digital wallet module to the issuer module, and

the issuer module is further configured to:

implement the initial API call such that the information corresponding to the outstanding bill is retrieved from an issuer database that is in communication with the issuer module, and

initiate an initial API response comprising the retrieved information corresponding to the outstanding bill.

6. The system as claimed in claim 4 or 5, wherein the information corresponding to the outstanding bill comprises at least one of: the payment amount corresponding to the outstanding bill, a currency of the payment amount, and details of one or more purchased products.

7. The system as claimed in claim 3, wherein the digital wallet module is in communication with a clearing centre module and the digital wallet module is further configured to transmit a secure financial message to the clearing centre module on a condition that the account record has been successfully updated,

wherein the secure financial message is transmitted without delay after receipt of the API response by the digital wallet module,

and wherein the secure financial message comprises: (i) the data comprising the payment amount corresponding to the outstanding bill, and (ii) at least one of: an identity of a payer of the payment amount and a number of the payer's bank account from which the payment amount is to be deducted.

8. The system as claimed in claim 7, wherein the issuer module is in communication with the clearing centre module and the issuer module is further configured to receive a consolidated remittance message from the clearing centre module,

wherein the consolidated remittance message is transmitted from the clearing centre module at a close of a settlement cycle,

and wherein the consolidated remittance message is based on at least the secure financial message.

9. A method for facilitating payment of a bill, comprising:

transmitting, from a digital wallet module to an issuer module, data comprising:

card details corresponding to a payment card having an outstanding bill; and

a payment amount corresponding to the outstanding bill; and

updating, at the issuer module:

an account record associated with the payment card to reflect the payment amount corresponding to the outstanding bill,

wherein the account record is updated in real-time without delay after the data comprising the card details and the payment amount are received at the issuer module.

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

exposing functions of the issuer module via an application programming interface (API);

initiating, by the digital wallet module, an API call such that the data comprising the card details and the payment amount is transmitted from the digital wallet module to the issuer module; and

implementing, by the issuer module, the API call such that the account record associated with the payment card is updated to reflect the payment amount corresponding to the outstanding bill.

11. The method as claimed in claim 10, further comprising:

initiating, by the issuer module, an API response comprising an indication of receipt of the payment amount on a condition that the account record is successfully updated.

12. The method as claimed in claim 10 or 11, further comprising:

transmitting, from the digital wallet module to the issuer module, additional data comprising:

card details corresponding to the payment card; and

a request for information corresponding to the outstanding bill; and

transmitting, from the issuer module to the digital wallet module:

information corresponding to the outstanding bill in response to the request.

13. The method as claimed in claim 12, further comprising:

initiating, by the digital wallet module, an initial API call such that the additional data comprising the card details and the request for information is transmitted from the digital wallet module to the issuer module; and

implementing, by the issuer module, the initial API call such that the information corresponding to the outstanding bill is retrieved from an issuer database; and

initiating, by the issuer module, an initial API response comprising the retrieved information corresponding to the outstanding bill.

14. The method as claimed in claim 12 or 13, wherein the information corresponding to the outstanding bill comprises at least one of: the payment amount corresponding to the outstanding bill, a currency of the payment amount, and details of one or more purchased products.

15. The method as claimed in claim 11, further comprising:

transmitting a secure financial message from the digital wallet module to a clearing centre module on a condition that the account record has been successfully updated,

wherein the secure financial message is transmitted without delay after receipt of the API response by the digital wallet module,

and wherein the secure financial message comprises: (i) the data comprising the payment amount corresponding to the outstanding bill, and (ii) at least one of: an identity of a payer of the payment amount and a number of the payer's bank account from which the payment amount is to be deducted.

16. The method as claimed in claim 15, further comprising:

transmitting a consolidated remittance message from the clearing centre module to the issuer module,

wherein the consolidated remittance message is transmitted at a close of a settlement cycle,

and wherein the consolidated remittance message is based on at least the secure financial message.