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## Visa Buy Later Pay Later

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# **Visa Buy Later Pay Later**

**VISA**

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**(ii) Ajit Vilasrao Patil**

## **TECHNICAL FIELD**

[0001] The present invention, in general, relates to an automated, secure and reliable payment system, and more particularly, but not exclusively to a system and a method for supporting recurring payments for personal and commercial purchases in four party arrangement.

## **BACKGROUND**

[0002] A challenge with existing payment ecosystem is a lack of security controls over consumer data, such as personal information, preferences, search queries etc. Services are increasingly biased (e.g., search), and it is often difficult to track and control access of the data and understand how the data is being used. As data is aggregated, transformed, and transferred from party to party, it is difficult to determine the provenance of the data.

[0003] This risk is increasingly becoming apparent as every day transactions are being tracked, labelled, and collected. For example, a malicious party may be able to aggregate data from various sources about a customer to access information related to customer's identity that the customer did not intend to become public. Further, today's payment ecosystem is plagued with consumer data breaches directly at Merchant Data Centers. Further, the current ecosystems do not support recurring payments for personal and commercial purchases in a four party arrangement, unless the integration is done by Merchants via Buy now Pay Later (BNPL) Players. Buy now pay later (BNPL) is a type of short-term financing that allows users to make purchases and pay for them over time, usually with no interest. Based on the above limitations, there exists a need for techniques to efficiently establish an automated, secure and reliable payment platform that allow recurrent transactions.

## **SUMMARY**

[0004] The present disclosure provides a system and method for an automated, secure and reliable payment platform that allow recurrent transactions. The present disclosure supports recurring payments for personal and commercial purchases in a four party arrangement. The method comprises: initiating transactions based on the user's schedules; providing the user an ability to create, program, and cancel the schedules;

and generating an intuitive program schedule, due to which the card is not stored as card on file at merchant location, thereby preventing fraud.

[0005] The foregoing summary is illustrative only and is not intended to be in any way limiting. In addition to the illustrative aspects, embodiments, and features described above, further aspects, embodiments, and features will become apparent by reference to the drawings and the following detailed description.

## **DESCRIPTION OF DRAWINGS**

[0006] The accompanying drawings, which are incorporated in and constitute a part of this disclosure, illustrate exemplary embodiments and together with the description, serve to explain the disclosed principles. In the figures, the left-most digit(s) of a reference number identifies the figure in which the reference number first appears. The same numbers are used throughout the figures to reference like features and components. Some embodiments of device and/or methods in accordance with embodiments of the present subject matter are now described below, by way of example only, and with reference to the accompanying figures.

[0007] **Figure 1** illustrates an exemplary environment of a system for implementing embodiments consistent with the present disclosure.

[0008] **Figure 2A** illustrates a graphical programming interface for invoking a VISA schedule program (VSP), in accordance with some embodiments of the present invention.

[0009] **Figure 2B** illustrates a graphical programming interface to make programmable schedules, in accordance with some embodiments of the present invention.

[0010] **Figure 2C** illustrates a representation of an intuitive program schedule, in accordance with some embodiments of the present invention.

[0011] **Figure 3** illustrates a flow diagram representing a method for initiating the VSP platform for recurrent transactions, in accordance with some embodiments of the present invention.

[0012] It should be appreciated by those skilled in the art that any block diagrams

herein represent conceptual views of illustrative systems embodying the principles of the present subject matter. Similarly, it will be appreciated that any flowcharts, flow diagrams, state transition diagrams, pseudo code, and the like represent various processes which may be substantially represented in computer readable medium and executed by a computer or processor, whether or not such computer or processor is explicitly shown.

### **DETAILED DESCRIPTION**

**[0013]** In the present document, the word “exemplary” is used herein to mean “serving as an example, instance, or illustration.” Any embodiment or implementation of the present subject matter described herein as “exemplary” is not necessarily to be construed as preferred or advantageous over other embodiments.

**[0014]** While the disclosure is susceptible to various modifications and alternative forms, specific embodiment thereof has been shown by way of example in the drawings and will be described in detail below. It should be understood, however, that it is not intended to limit the disclosure to the particular forms disclosed, but on the contrary, the disclosure is to cover all modifications, equivalents, and alternatives falling within the scope of the disclosure.

**[0015]** The terms “comprises”, “comprising”, or any other variations thereof, are intended to cover a non-exclusive inclusion, such that a setup, device, or method that comprises a list of components or steps does not include only those components or steps but may include other components or steps not expressly listed or inherent to such setup or device or method. In other words, one or more elements in a system or apparatus preceded by “comprises... a” does not, without more constraints, preclude the existence of other elements or additional elements in the system or method.

**[0016]** In the following detailed description of the embodiments of the disclosure, reference is made to the accompanying drawings that form a part hereof, and in which are shown by way of illustration specific embodiments in which the disclosure may be practiced. These embodiments are described in sufficient detail to enable those skilled in the art to practice the disclosure, and it is to be understood that other embodiments may be utilized and that changes may be made without departing from the scope of the present disclosure. The following description is, therefore, not to be taken in a limiting

sense.

**[0017]** **Figure 1** illustrates an exemplary environment of a system 100 for implementing embodiments consistent with the present disclosure. The system 100 provides a safe and reliable payment platform that allow electronic recurrent transactions. The system 100 comprises a VISA schedule program 140 that provides a secure method for using payment credentials for the electronic recurrent transactions. Further, the system 100 sets up a white label secure, standard, recurring electronic payment platform that seamlessly integrates with Merchant ecommerce Portals via plugins/APIs. The VISA schedule program 140 facilitates automation of recurrent transactions through schedule building via IFTTT (“If This Then That”) programming procedures.

**[0018]** In an embodiment of the present disclosure, the electronic recurrent transactions of the VISA schedule program 140 of Figure 1 are carried out between a user 110 and a merchant 150. Further, in the present system, the user 110 may be a retail cardholder 120 or a commercial cardholder 130. Further, the present invention provides an automatic system that allows secure, guaranteed payment processing for, both retail (individuals) and commercial (businesses) cardholders. Further, the present invention facilitates building of programmable schedules based on IFTTT procedures with ability to choose particular payment instrument for a specific transaction, thereby providing greater flexibility and freedom to manage finances. For instance, the system provides an automated, secure and reliable system that shields the merchant 150 from consumer personal information (PI) loss and eliminates Publicly available information (PAI) audits. Further, the present disclosure aids in increased business and consumer loyalty by providing a hassle free recurring transactions.

**[0019]** **Figure 2A** illustrates a graphical programming interface (GUI) for invoking or initiating a Visa schedule program (VSP) in accordance with some embodiments of the present invention. The graphical programming interface 200 displays a merchant website for the secured electronic recurrent transactions. For instance, the merchant website as illustrated in Figure 2A is bestgroceries.com. The GUI on the website shows a merchant id 210, a user id 220, and a cart id 230. Further, the GUI 200 shows cart details that contain items purchased by the user 110, quantity of each item, and price of the corresponding item, available in the merchant ecommerce portals. Further, the GUI

200 enables the user 110 with a 'PAY' option for secured payment credentials. Further GUI 200 also enables a VISA schedule 240 that on click invokes a VISA schedule program 250 for creating and programming schedules via IFTTT programming procedures for automating the recurrent transactions.

**[0020]** **Figure 2B** illustrates a GUI 250 for creating and programming schedules via the VISA schedule program in accordance with some embodiments of the present disclosure. Particularly, the GUI 250 assists the user in building a schedule based on the requirements of the user 110. For example, the schedule may include a recurrence pattern 260 that provides parameters such as Daily, weekly, Monthly, yearly etc. for programming a schedule for the user 110, and so on, but not limiting thereto. Further, the recurrence pattern 260 providing an option to the user 110 for recurring the schedule for every week according to a particular day of the week, etc. Furthermore, the GUI 250 presents a range of recurrence 270 that includes a start date, an end date, a number of occurrences, or provides an option without an end date. Further, the GUI 250 enables the user 110 to click 'OK' button or 'cancel' button for saving or canceling the schedule. Further, the user 110 is allowed to remove any of the above-mentioned patterns by clicking 'remove recurrence' option. Particularly, the GUI 250 enables the user 110 with features like range of recurrence to recur a transaction a particular day for oscillation.

**[0021]** **Figure 2C** illustrates a representation of an intuitive program schedule 280, in accordance with some embodiments of the present invention.

**[0022]** To make a schedule more flexible and useful a graphical and intuitive programming interface such as SCRATCH may be provided where user can create constructs like loops and employ IFTTT actions. Scratch is a high-level block-based visual programming language. For example, the IFTTT actions can be employed for various criterion such as: (i) If cart value > 500 skip payment and generate notification; OR (ii) If tran\_day!= "Monday", skip payment; OR (iii) If MCC = Grocery, use card = "4xxxxxx", etc., but it shall not be considered as limiting. Further, the IFTTT actions of the intuitive program schedule 280 includes other features such as (i) expire the schedule, to say on Jan 1<sup>st</sup> 2020; or (ii) send alert, to say +65xxxxxx63 of schedule id 12xx7250 that automates the recurrent transactions schedule building via IFTTT programming procedures.

**[0023]** **Figure 3** shows a flowchart illustrating a method for initiating the VISA schedule program (VSP) platform of the electronic recurrent transactions, in accordance with some embodiments of the present invention. **At block 310**, the method comprises initiating the VSP for transactions based on the schedule in accordance with Figure 2A. For example, on clicking the Visa Schedule button the GUI 250 is invoked that facilitates schedule building via IFTTT programming procedures. **At block 320**, the method comprises providing the user 110 an ability to create, program, and cancel schedules in accordance with Figure 2B. For example, the VISA schedule program 250 comprises a recurrence pattern 260 and a range of recurrence 270, but not limiting thereto. **At block 330**, the method comprises an intuitive program schedule 280 in accordance with Figure 2C, due to which the card is not stored as card on file at merchant location, prevents fraud. For example, in one of the embodiment the VSP program may send an alert to the registered mobile id of registered user with the schedule id thereby providing a secured method of for electronic recurrent transactions.

**[0024]** Further, in an embodiment, the present invention offers a solution that targets two key players of the four party payment ecosystem. Particularly, for Merchants, the system provides an automated, secure and reliable ecosystem that shields the merchants from consumer PI loss and results in savings by eliminating PAI audits. Furthermore, the system also has a provision for hassle free recurring transactions which results in increased business and consumer loyalty.

**[0025]** Further, in an embodiment of the present disclosure provides a solution for the cardholder (Retail and Commercial), both individuals and business having an automatic system to translate secure, guaranteed payment processing.

**[0026]** Further, the present invention enumerates a utility of building programmable schedules based on IFTTT procedures and actions with the ability to choose a particular payment instrument for a specific transaction thereby providing greater flexibility and freedom to user in management of their finances. Furthermore, the system facilitates features like range of recurrent and choosing a particular day for oscillation and employs a new generation graphical programming interface like SCRATCH to make schedules.

**[0027]** In an embodiment of the present disclosure, the inventive feature based on



process flow enrolment is carried out at both user as well as merchant level, where merchant provides information like a) Acquirer id; b) Self Geo location; c) Corporate, DBA name; etc. Further, the user provides information like: a) VSP User id; b) Payment Instrument details via secure channel like VBV; c) Phone # associated with a mobile device for alerts and messaging. Further, the VSP stores the above information along with other metadata and builds relations among them in the format provided in Table 1-3.

**TABLE 1:**

User id	Merchant id	Cart id	Cart value	Start date	End date	Recurrence pattern	Status
xyz@gmail.com	BG7869	XGLY7869	59.50 USD	10/8/2014	12/10/2014	W1WP	ACTIVE

**TABLE 2:**

Merchant id	Merchant Corp name	Acquirer BIN	Geolocation	Status
BG7869	BEST GROCER	123456	CA,94404	active

**TABLE 3:**

User id	PI details	Status
xyz@gmail.com	Card#CUU/BCU ref.	active

**[0028]** In an embodiment, the present disclosure includes a cart comprising products and services that user 110 chooses to purchase at a merchant portal. Cart is an abstraction containing information about products, services. Once a cart is filled with products to be purchased, the user invokes VSP, after which the VSP receives information like user id, merchant id, cart id and stores them into corresponding relations. Further, user is prompted to create a schedule that may have different levels of temporal granularity namely: i) Daily ii) Weekly iii) Monthly iv) Quarterly v)

Yearly.

**[0029]** Further, the present disclosure includes controls like span/ of recurrence i.e., perpetual or up to n occurrences, time of occurrence are provided. For example, once the user 110 submits the schedule it is baked into the system 100 and set to be executed once time arrives. To make a schedule more flexible and useful, a graphical, intuitive programming interface like scratch is provided where user can create constructs like loops and employ IFTTT actions to further automate payments. For instance, the system may execute the instructions like: (i) If merchant category is ‘grocers’, pay using PI 2; (ii) If cart amount > 500, skip payment; and (iii) If payment is declined, alert on +6597727869, that provides a hassle free recurring transactions which results in increased business and consumer loyalty.

**[0030]** In an embodiment, the present disclosure has a transactional flow for every day, multiple times a day, in which all active schedules are scanned and checked for conditions they deem to satisfy. For instance, one of the key field to validate is recurrence pattern field 260, which provides information like: i) Frequency of execution; ii) Execution Pattern i.e. continuous (occurs every week) or discrete (occurs every 3rd week); iii) Particular day of execution; but not limiting to.

**[0031]** Furthermore, one or more computer-readable storage media may be utilized in implementing embodiments consistent with the present disclosure. A computer-readable storage medium refers to any type of physical memory on which information or data readable by a processor may be stored. Thus, a computer-readable storage medium may store instructions for execution by one or more processors, including instructions for causing the processor(s) to perform steps or stages consistent with the embodiments described herein. The term “computer-readable medium” should be understood to include tangible items and exclude carrier waves and transient signals, i.e., be non-transitory. Examples include Random Access Memory (RAM), Read-Only Memory (ROM), volatile memory, non-volatile memory, hard drives, Compact Disc (CD) ROMs, DVDs, flash drives, disks, and any other known physical storage media.

**[0032]** The language used in the specification has been principally selected for readability and instructional purposes, and it may not have been selected to delineate or circumscribe the inventive subject matter. Accordingly, the disclosure of the

embodiments of the disclosure is intended to be illustrative, but not limiting, of the scope of the disclosure.

**[0033]** With respect to the use of substantially any plural and/or singular terms herein, those having skill in the art can translate from the plural to the singular and/or from the singular to the plural as is appropriate to the context and/or application. The various singular/plural permutations may be expressly set forth herein for sake of clarity.

**[0034]** The present invention provides several advantages to the merchant, including but not limited to better differentiation against competitors; driving higher purchasing on existing member accounts; and increasing sales by providing flexible pay-over-time solutions to the customer.

### **ADVANTAGES OF THE PRESENT INVENTION:**

**[0035]** In an embodiment, the solution proposed in the present disclosure for to automated, secure and reliable payment platform that allow recurrent transactions enables creating a platform providing the following benefits:

- To provide a secure method to use Payment Credentials for electronic recurrent transactions.
- To set up a white label secured, standard, recurring electronic payment platform with seamless integration with Merchant ecommerce Portals via plugins /APIs.
- To automate recurrent transactions schedule building via IFTTT programming procedures.

# Visa Buy Later Pay Later

## ABSTRACT

The present disclosure relates to an automated, secure and reliable payment platform that allows recurrent transactions. Particularly, the present disclosure relates to system and method for supporting recurring payments for retail and commercial purchases in a four party arrangement. The method comprises: initiating (S310) a Visa Schedule Program (VSP) for transactions based on the user's schedule(s); providing (S320) the user 110 an ability to create, program, and cancel the schedule(s); and generating (S330) an intuitive program schedule 280, due to which the card is not stored as card on file at merchant location, preventing fraud.

### **Figure 3**

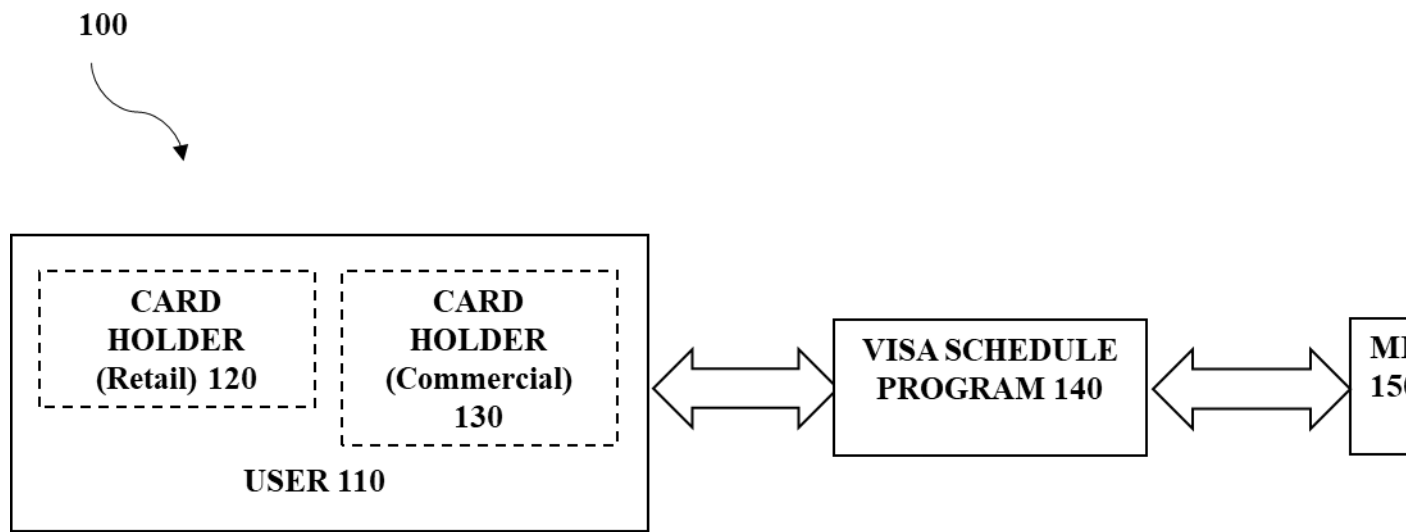


Figure 1

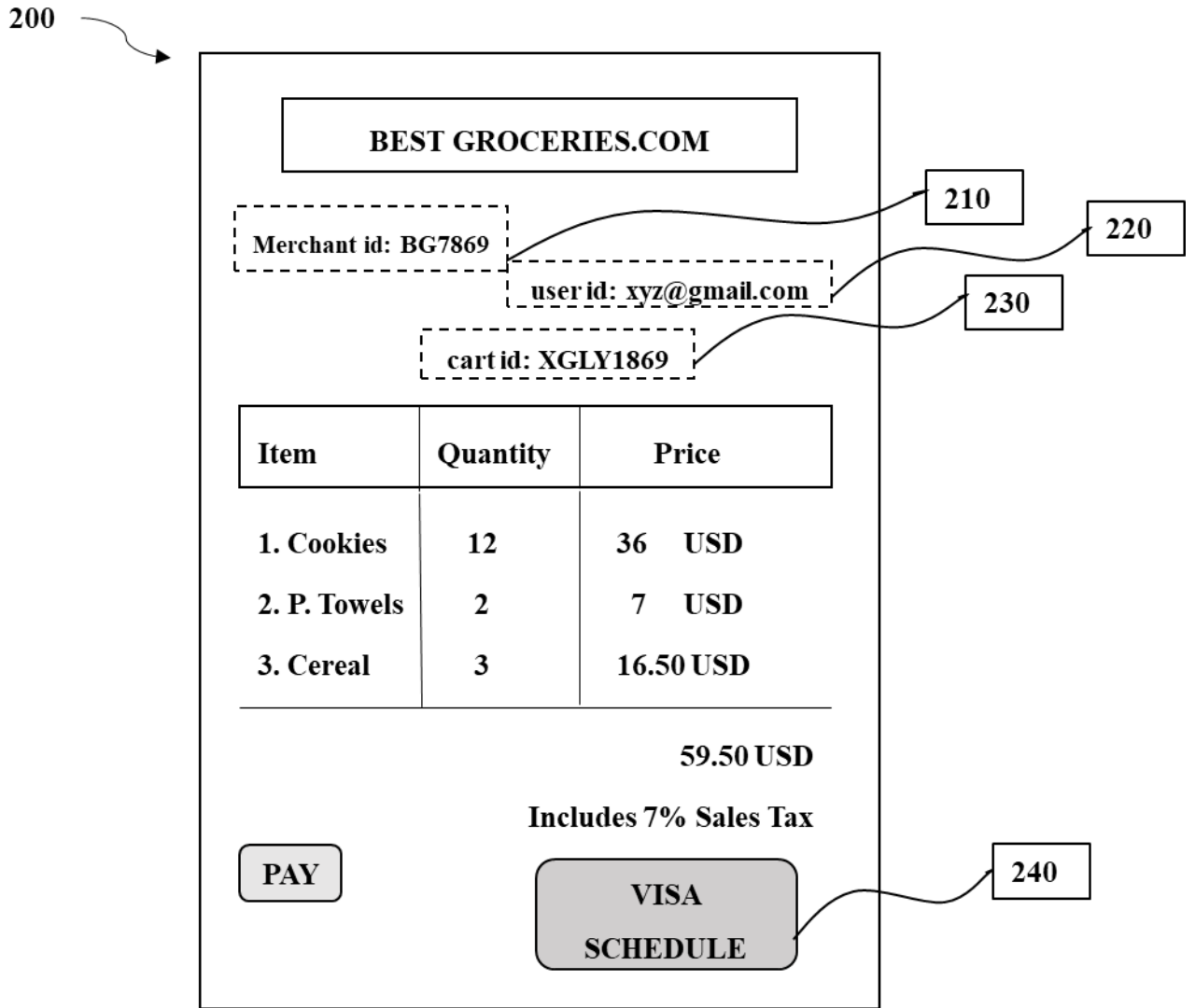


Figure 2A

250

Recurrence pattern 260

Range of recurrence 270

Daily

Weekly

Monthly

Yearly

Recur every  week(s) on:

Sunday  Monday  Tuesday  Wednesday

Thursday  Friday  Saturday

Start  ▼

No end date

End After:  occurrences

End by:  ▼

Figure 2B

280

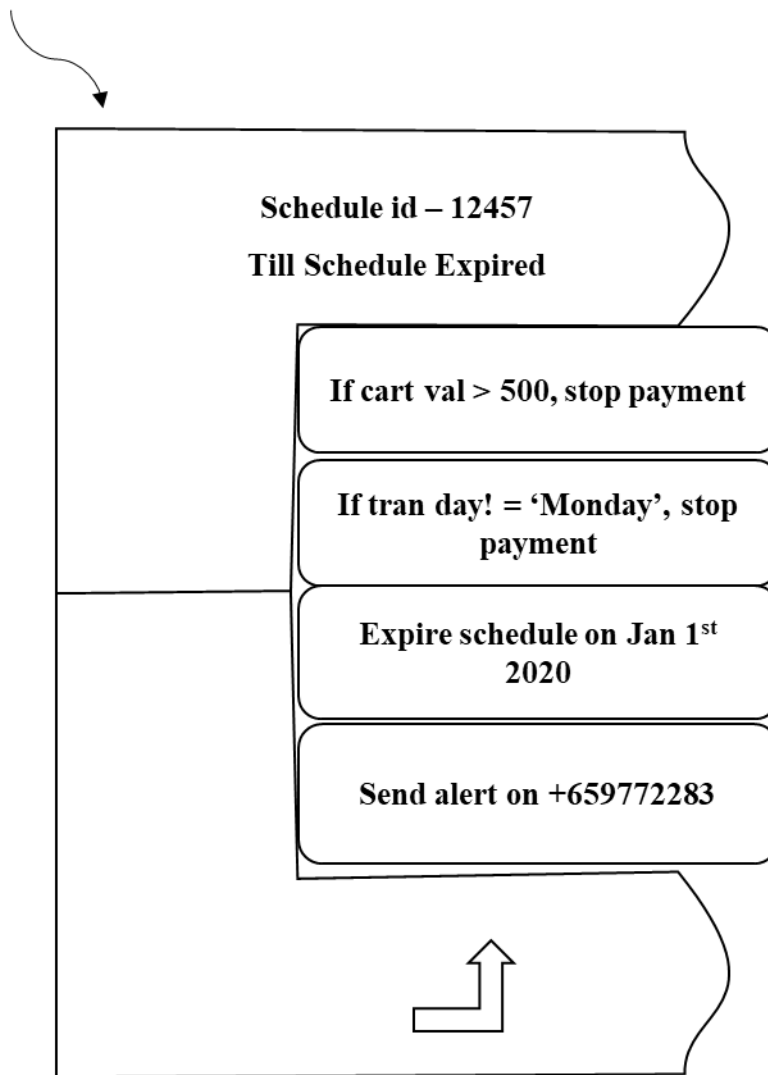
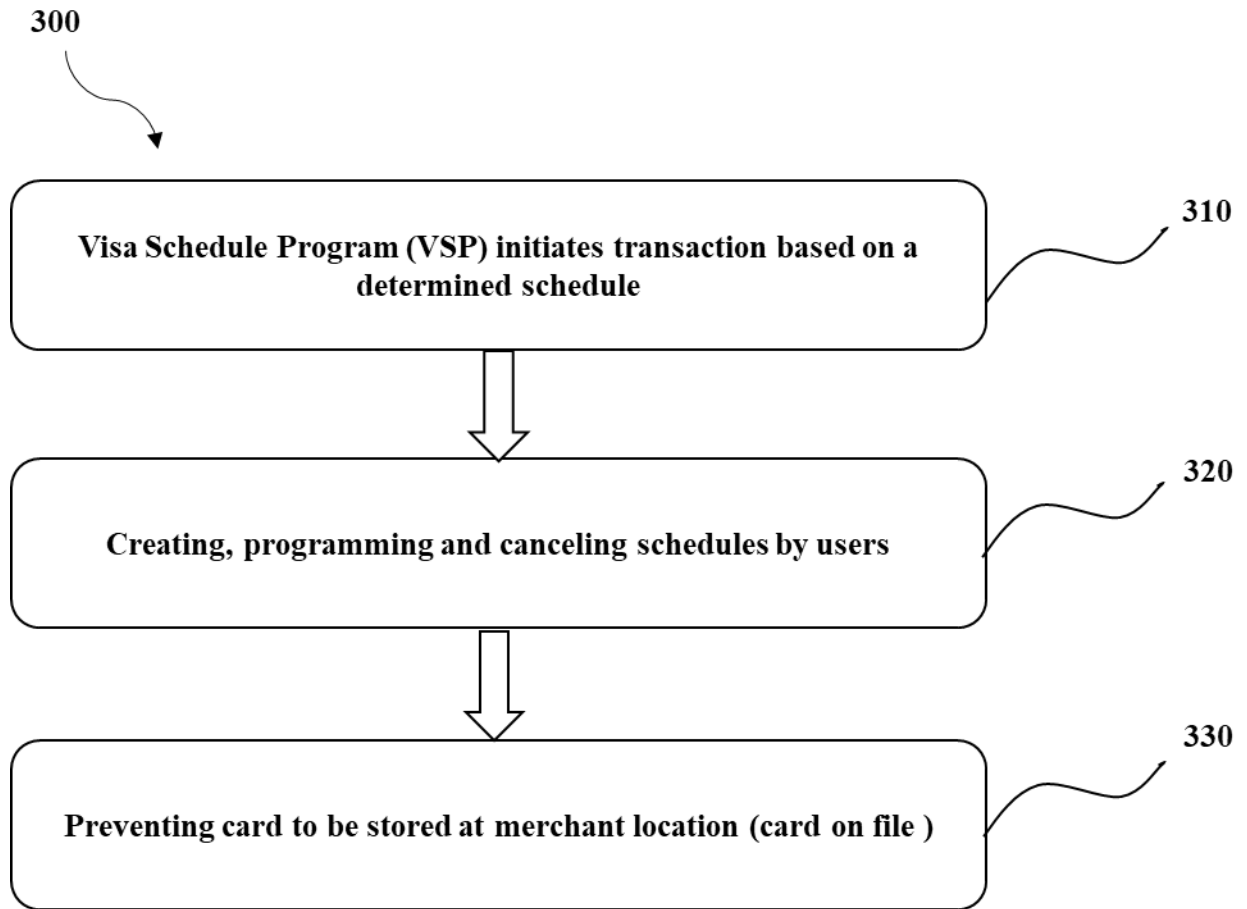


Figure 2C





**Figure 3**