Amrita Vishwa Vidyapeetham

Use Cases

For

Project-based Software Engineering Course

Tata Consultancy Services Limited

Nov-2017

Contents

[1. Payment wallet (like PAYTM) 3](#_Toc503772198)

[2. Online-banking application 4](#_Toc503772199)

[3. Cab-hiring Application 5](#_Toc503772200)

[4. Airline seat selection, boarding pass issuance and aircraft boarding 6](#_Toc503772201)

[5. Booking seats in a cinema theater 8](#_Toc503772202)

[6. Expense Tracker Application 9](#_Toc503772203)

[7. Hotel Ordering Application 10](#_Toc503772204)

[8. Library Application 11](#_Toc503772205)

[9. Train Ticket Application 12](#_Toc503772206)

[10. Chat Application 13](#_Toc503772207)

[11. Email Application 14](#_Toc503772208)

# Payment wallet (like PAYTM)

**Sprint-1**: Should allow funding from multiple accounts. Fund transfer should be enabled between the Wallet and linked accounts.

* Manage the header functions
  + Login Management
  + Wallet Management
  + Shopping Cart Management
  + Profile Management
* Upon clicking on login button or any button that requires the customer to be logged-in
  + open the login/register page
  + enable logging-in [user-id, password, OTP (if applicable)]
  + upon successful login, redirect to the page intended
  + upon failure, redirect to exception processing (retry, forgot password or register)
* Upon clicking the Profile Management Button
  + Show the personal information collect and allow options for editing (name, address, DoB, current password, preferences)
  + Mandate upload option for id proof (and/or address proof) for name, DoB and address changes.
  + Upon saving show the updated details (indicating the fields pending KYC approvals)
* Upon clicking the Wallet Button
  + display the current wallet balance and the save source of funds
  + allow funding of wallet from saved details
    - Savings Account
    - Credit Card
  + provide option to fund from a new source and save details
  + display the updated wallet balance
* Upon clicking the Shopping Cart Button
  + Show the items in the cart with options for each item to
    - select the item for this purchase
    - edit the quantity
    - delete the item
  + Upon clicking the confirm button, show confirmation of order
  + Upon agreeing to purchase, allow payment from
    - Wallet
    - Savings Account
    - Credit Card
  + If the wallet does not have sufficient funds, allow partial billing of the remaining amount from other sources

**Sprint-2**: Payment from wallet should be enabled for purchases.

* Manage the content functions
  + Shop by Category (2 categories)
  + Bill Pay (1 category)
  + Book Tickets (1 provider)
* Manage Shopping (2 category – phones and accessories)
  + Choose the category
  + Show parameters for search for selection
  + Upon entering the parameters, allow search
  + Upon displaying results
    - Allow clicking on item to show more details
    - Select quantity, size, color, etc.
    - Add promotion code
    - Calculate amount
    - Add to cart
* Manage the Bill Pay (1 category – mobile recharge or electricity bill)
  + Choose the Provider
  + Enter the Account Number (Phone Number or Account Number)
  + Fetch Bill Amount
  + Apply Promo Code (select from list)
  + Pay Bill, allowing payment from
    - Wallet
    - Savings Account
    - Credit Card
  + If the wallet does not have sufficient funds, allow partial billing of the remaining amount from other sources
* Manage ticket booking (1 category – movie or bus ticket)
  + Choose the Provider
  + Enter the number of tickets
  + If Bus Ticket, provide additional information (eg. Name, age, etc.)
  + If Movie Ticket, choose seats
  + Calculate Bill Amount
  + Apply Promo Code (select from list)
  + Pay Bill, allowing payment from
    - Wallet
    - Savings Account
    - Credit Card
  + If the wallet does not have sufficient funds, allow partial billing of the remaining amount from other sources

# Online-banking application

Sprint-1: Should allow display of multiple accounts with balances and recent transactions.

* Manage the header functions
  + Login Management
  + Alert/Messages Management
  + Account Management
  + Profile Management
* Upon clicking on login button or any button that requires the customer to be logged-in
  + open the login/register page
  + enable logging-in [user-id, password, OTP (if applicable)]
  + upon successful login, redirect to the page intended
  + upon failure, redirect to exception processing (retry, forgot password or register)
* Upon clicking the Alert/Messages Button
  + display the current list of alerts/messages/interactions
  + allow processing of these messages
    - open the message to view the contents/response
    - mark as unread
    - delete message
  + allow creating a new message/complaint/query and submit
* Upon clicking the Account Management Button
  + Show the account categories (savings, home loan, investments, insurance, credit cart, etc.) currently linked to this login, and for each category
    - allow expand to view the linked accounts in that category, along with the current balance
    - click to view more details (temporarily disabled [under construction) – enabled for Sprint-2]
    - delete the account linking
* Upon clicking the Profile Management Button
  + Show the personal information collect and allow options for editing (name, address, DoB, current password, preferences)
  + Mandate upload option for id proof (and/or address proof) for name, DoB and address changes.
  + Upon saving show the updated details (indicating the fields pending KYC approvals)

**Sprint-2:** Should allow the user to perform a few banking transactions.

* Manage the account functions
  + Transaction History
  + Fund Transfer (Payee Setup, Standing Instructions)
  + Make Payment (Credit Card/Home Loan)
* Transaction History
  + Choose the search criteria (last 10 transactions, last month, date range)
  + Show the transaction history, for each transaction
    - display additional information
  + Allow dispute of transactions (credit card)
* Fund Transfer
  + Show the list of accounts from which funds can be transferred (savings, current)
  + Show the list of payees already setup, for each payee
    - display additional information on request
    - allow the payee to be selected
    - delete the payee from the list
    - allow an option to add a new payee to the list
  + Upon clicking Add new payee,
    - collect the information required for setting up a payee (Name, Bank Name, Branch Name, Account Number, etc.)
    - allow the payee to be added and be selected from the list
  + Upon selecting the payee
    - enter the amount that needs to be transferred
    - indicate if a standing instruction needs to be placed for recurring payments (periodicity and number of instances)
    - date on which the transfer should take place (or start for recurring payments)
    - Upon clicking the confirm button, show confirmation of request
* Make a payment
  + Select CC or HL account
  + Show the details (Balance, Last Payment, Next Payment Due, Due Date, etc.)
  + Upon clicking the Make a Payment Button, pay Bill, allowing payment from
    - Saving Accounts
    - Checking Accounts
  + Select the account from which payment should be made
  + Check if sufficient balance is available in the account
  + Upon clicking the confirm button, process the payment
  + Show the updated details on the CC/HL account

# Cab-hiring Application

**Sprint-1:** Should allow linking multiple accounts. Fund transfer should be enabled between the UBER account and linked accounts.

* Manage the header functions
  + Login Management
  + Wallet Management
  + Promotion Codes Management
  + Profile Management
* Upon clicking on login button or any button that requires the customer to be logged-in
  + open the login/register page
  + enable logging-in [user-id, password, OTP (if applicable)]
  + upon successful login, redirect to the page intended
  + upon failure, redirect to exception processing (retry, forgot password or register)
* Upon clicking the Wallet Button
  + display the primary default wallet balance and other saved source of funds
  + allow funding of wallet from saved details
    - Savings Account
    - Credit Card
  + provide option to fund from a new source and save details
  + display the updated wallet balance
* Upon clicking the Promo Codes Button
  + Show the promotion items enrolled into and for each item to
    - see additional information
    - delete the item
  + Provide option to add a new promotion code and validate it
  + Upon confirmation add the promotion code to the list
* Upon clicking the Profile Management Button
  + Show the personal information collect and allow options for editing (name, address, DoB, current password, preferences)
  + Mandate upload option for id proof (and/or address proof) for name, DoB and address changes.
  + Upon saving show the updated details (indicating the fields pending KYC approvals)

**Sprint-2:** the application should show the cars that are available for renting allow the user to select a car and make the reservation

* Manage Car Selection (2 categories – sedans and compacts)
  + Choose the category
  + Show parameters for search for selection
  + Upon entering the parameters, allow search
  + Upon displaying results
    - Allow clicking on item (car) to show more details
    - Select start date, end date, distance, insurance details, etc.
    - Add to promotion code
    - Calculate amount
  + Make a payment, allowing payment from
    - Wallet
    - Savings Account
    - Credit Card
  + If the wallet does not have sufficient funds, allow partial billing of the remaining amount from other sources
* Show the rental history, by listing all the previous rentals and for each rental
  + Allow clicking on the item (car) to show more details
  + Show the details on the pick-up date time, drop-off date time, places travelled (may show map of route taken)
  + Billing details and payment history

# Airline seat selection, boarding pass issuance and aircraft boarding

**Sprint-1:** Allow the user to enter the ticket information and enable the user to select one of the available seats, ensuring that there are no conflicts with two users trying to select the same seat.

* Manage the header functions
  + Login Management
  + Booking Management
  + Promotion Codes Management
  + Profile Management
* Upon clicking on login button or any button that requires the customer to be logged-in
  + open the login/register page
  + enable logging-in [user-id, password, OTP (if applicable)]
  + upon successful login, redirect to the page intended
  + upon failure, redirect to exception processing (retry, forgot password or register)
* Upon clicking the Booking Management Button
  + display the list of bookings where travel is not yet completed
  + select the booking for which seat selection and boarding pass should be done
  + check if the departure is within 24 hours from current time
  + if the booking is not listed, allow the user to enter the PNR and last name for pulling up the booking and linking it to the login id
* Upon clicking the check-in button
  + Show the layout of the seating arrangement in the plane
    - enable only the seats for the class the booking has been made
    - cross the seats that have already been selected by others
    - provide warning message if the seat is an exit row seat
    - provide any cost involved if certain seats are not free for selection (certain seats with more leg space)
    - upon confirming the seats, generate a boarding pass with a bar code for scanning at terminal
    - give option to print or send boarding pass by email
* Upon clicking the Profile Management Button
  + Show the personal information collect and allow options for editing (name, address, DoB, current password, preferences)
  + Mandate upload option for id proof (and/or address proof) for name, DoB and address changes.
  + Upon saving show the updated details (indicating the fields pending KYC approvals)

**Sprint-2:** After the check-in is complete, issue a boarding pass with a scannable code that can be scanned by the agent's phone and board the passenger (this can be built as a mobile or desktop solution)

* Upon arrival at the gate for boarding
  + Select the flight for which boarding is being done in the desktop application
  + Pull up the list of customers that need to be boarded
  + Use a mobile phone with a 3rd party scanner app to scan the bar code/QR Code in the boarding pass and transfer the details to the main application running on the desktop via a Bluetooth connection
  + Upon receiving the bar code details, call a function to decode and validate the bar-code and board the customer
    - Update the database that the customer can be successfully boarded
    - Reject the boarding, if the customer is accidentally boarding the wrong flight
    - Check if there is any urgent message that needs to be passed to the customer
  + Display the details of the scan so that
    - a check can be done to verify if all the customers have been boarded
    - remove the customers from the list as they are successfully boarded
    - a list of the customers yet to be boarded is left showing, for making the announcements

# Booking seats in a cinema theater

**Sprint-1**: Allow the user to select one or more of the available seats and buy tickets for a cinema, ensuring that there are no conflicts with two users trying to select the same seat(s).

* Manage the header functions
  + Login Management
  + Profile Management
  + Wallet Management
  + My Activity Management
* Upon clicking on login button or any button that requires the customer to be logged-in
  + open the login/register page
  + enable logging-in [user-id, password, OTP (if applicable)]
  + upon successful login, redirect to the page intended
  + upon failure, redirect to exception processing (retry, forgot password or register)
* Upon clicking the Profile Management Button
  + Show the personal information collect and allow options for editing (name, address, DoB, current password, preferences)
  + Mandate upload option for id proof (and/or address proof) for name, DoB and address changes.
  + Upon saving show the updated details (indicating the fields pending KYC approvals)
* Upon clicking the Wallet Button
  + display the current wallet balance and the save source of funds
  + allow funding of wallet from saved details
    - Savings Account
    - Credit Card
  + provide option to fund from a new source and save details
  + display the updated wallet balance
* Upon clicking the My Activity Button
  + Show the items in my activity including
    - up-coming attractions which I have bookmarked
    - items that I have booked with dates in the future
    - my booking history
  + For each item in the list, provide options
    - to click and view additional information (actors, story, trailer, etc.)
    - delete bookmarked items
    - send e-pass for booked items as email/message
    - allow an option to make a new purchase
  + Upon clicking to make a new purchase,
    - Show parameters for search for selection (city, theaters, languages, date)
    - Upon entering the parameters, allow search
  + Upon displaying results
    - Allow clicking on item to show more details
    - Select # of seats to be booked using the seat map
    - Add promotion code
    - Calculate amount
  + Pay Bill, allowing payment from
    - Wallet
    - Savings Account
    - Credit Card
  + If the wallet does not have sufficient funds, allow partial billing of the remaining amount from other sources

**Sprint-2**: After the purchase is complete, issue a ticket with a scannable code that can be scanned by the ticket checker and allow the user to enter the cinema.

* Upon arrival at the theater for viewing
  + Select the event which is currently being screened for which entry is being granted in the application
  + Pull up the map of the seating arrangements indicating in different colors,
    - the seats that are vacant
    - the seats that are booked and yet to be occupied
    - the seats that have been occupied already
  + Use a mobile phone with a 3rd party scanner app to scan the bar code/QR Code in the ticket and transfer the details to the main application running on the desktop via a Bluetooth connection
  + Upon receiving the bar code details, call a function to decode and validate the bar-code and allow entry to the customer
    - Reject the entry, if the customer is accidentally entering the wrong event
    - Indicate the seats that need to occupied on the screen so that the agent can show the customer where the seats are in the theater
  + Display the details of the scan so that
    - a check can be done to verify if all the customers have been allowed entry
    - the display should continue to show the seats that are yet to be occupied

# Expense Tracker Application

**Sprint-1:** User should be able set category-wise spend limit and application should alert the user when the limits are breached. This can be created as a mobile app, or as a desktop application

* Manage the header functions
  + Login Management
  + Profile Management
  + Settings Management
  + Show Analysis
* Upon clicking on login button or any button that requires the customer to be logged-in
  + open the login/register page
  + enable logging-in [user-id, password, OTP (if applicable)]
  + upon successful login, redirect to the page intended
  + upon failure, redirect to exception processing (retry, forgot password or register)
* Upon clicking the Profile Management Button
  + Show the personal information collect and allow options for editing (name, address, DoB, current password, preferences)
* Upon clicking the Settings Button
  + Categories
    - display the current list of categories and the maximum monthly spending limit under each category
    - display the % of expense before alert is generated for each category and the incremental % for sending alerts
    - provide option to add new categories
    - provide an option to list the common shops names under these categories
  + Message Patterns
    - Type the pattern of the messages usually received from the card companies
* Upon clicking the Show Analysis Button
  + display the current list of categories and the date ranges for which data should be displayed
  + display the transactions under each of these categories for this date range, allowing the user to
    - select the transaction to show the SMS message for that transaction
    - move the transaction to a different category
    - delete the transaction
    - add a transaction manually or using a voice to text conversion (optional)
  + draw a chart to show the distribution of the amount under various categories
  + separately, indicate the amount spent under each category as a % for the current month and reset at the beginning of each month

**Sprint-2:** Application should be able track the incoming messages, process it and classify them in four-five different categories.

* If the application is not mobile app, use a 3rd party software that is capable of importing the SMS messages on a regular basis to the PC. If it is a mobile app, then the following can be done in the phone itself
* Remember the date and time of the last message scanned.
* For all the new messages received after this time,
  + Check if the message is an expense alert from a card, bank, PAYTM, etc. using pattern matching (regex).
  + If it is an expense alert, extract the date, shop name and transaction amount
  + Based on the shop name, assign the transaction to the categories defined
  + If the shop name is new, show a pop-up for the user to assign this shop name to a particular category
  + If the alert criteria for that category is breached, then send an alert to the user to make him/her aware of the spending limit

# Hotel Ordering Application

**Sprint-1:** Setup required for managing any hotel ordering application. Once customer enters a hotel the customer is given a tablet device in which they can manage the order

* Manage the header functions
  + Login Management
  + Wallet Management
  + Order Management
  + Profile Management
* Upon clicking on login button or any button that requires the customer to be logged-in
  + open the login/register page
  + enable logging-in [user-id, password, OTP (if applicable)]
  + upon successful login, redirect to the page intended
  + upon failure, redirect to exception processing (retry, forgot password or register)
* Upon clicking the Profile Management Button
  + Show the personal information collect and allow options for editing (name, address, DoB, current password, preferences)
  + Mandate upload option for id proof (and/or address proof) for name, DoB and address changes.
  + Upon saving show the updated details (indicating the fields pending KYC approvals)
* Upon clicking the Wallet Button
  + display the current wallet balance and the save source of funds
  + allow funding of wallet from saved details
    - Savings Account
    - Credit Card
  + provide option to fund from a new source and save details
  + display the updated wallet balance
* Upon clicking the Orders Button
  + Show the previous orders and for each item in the list, provide options to
    - click and view additional information (items, cost, quantity, etc.)
  + allow an option to make a new order (temporarily disabled [under construction) – enabled for Sprint-2]
  + allow the option to edit the current order to add additional items (temporarily disabled [under construction) – enabled for Sprint-2]

**Sprint-2**: Payment from wallet should be enabled for purchases.

* Manage Order
  + Upon clicking to make a new order or edit the current order
    - Show parameters for search for selection (breakfast/lunch/dinner, North Indian/South Indian, etc.)
    - Upon entering the parameters, allow search
  + Upon displaying results
    - Allow clicking on item to show more details (display description, ingredients, images, cost, etc.)
    - Select # of plates to be ordered
    - Add to order and ask if more items need to be ordered
  + Upon completion of an order, close the tab and pay Bill, allowing payment from
    - Wallet
    - Savings Account
    - Credit Card
  + If the wallet does not have sufficient funds, allow partial billing of the remaining amount from other sources
  + Upon completion of the payment, provide an option give feedback on the ambience, cleanliness, food quality, taste, service, etc.

# Library Application

**Sprint-1:** Setup required for managing a Library application, to be used by an end-user as an app (or web-page).

* Manage the header functions
  + Login Management
  + Wallet Management
  + Booking Management
  + Profile Management
* Upon clicking on login button or any button that requires the customer to be logged-in
  + open the login/register page
  + enable logging-in [user-id, password, OTP (if applicable)]
  + upon successful login, redirect to the page intended
  + upon failure, redirect to exception processing (retry, forgot password or register)
* Upon clicking the Profile Management Button
  + Show the personal information collect and allow options for editing (name, address, DoB, current password, preferences)
  + Mandate upload option for id proof (and/or address proof) for name, DoB and address changes.
  + Upon saving show the updated details (indicating the fields pending KYC approvals)
* Upon clicking the Wallet Button
  + display the current wallet balance and the save source of funds
  + allow funding of wallet from saved details
    - Savings Account
    - Credit Card
  + provide option to fund from a new source and save details
  + display the updated wallet balance
* Upon clicking the Bookings Button
  + Show the previous Bookings and for each item in the list, provide options to
    - click and view additional information (author, genre, due-date, etc.)
  + allow an option to make a new Booking (temporarily disabled [under construction) – enabled for Sprint-2]
  + allow the option to edit the current Booking to extend the due-date (temporarily disabled [under construction) – enabled for Sprint-2]

**Sprint-2**: Payment from wallet should be enabled for purchases.

* Manage Booking
  + Upon clicking to make a new Booking or edit the current Booking
    - Show parameters for search for selection (author, genre, date-available, etc.)
    - Upon entering the parameters, allow search
  + Upon displaying results
    - Allow clicking on item to show more details (display description, author, genre, date-available, etc.)
    - Add to Booking and ask if more items need to be Booked
    - Extend a current booking if the book is available
  + Upon return of an Book, close the tab and pay Bill, allowing payment from
    - Wallet
    - Savings Account
    - Credit Card
  + If the wallet does not have sufficient funds, allow partial billing of the remaining amount from other sources
  + Upon completion of the payment, provide an option give feedback on the content, story-line, etc.
  + Note: Need to handle the scenarios where the books have not been returned on time, but another user has requested for the same.

# Train Ticket Application

**Sprint-1:** Setup required for managing a ticket booking application, to be used by an end-user as an app (or web-page).

* Manage the header functions
  + Login Management
  + Wallet Management
  + Booking Management
  + Profile Management
* Upon clicking on login button or any button that requires the customer to be logged-in
  + open the login/register page
  + enable logging-in [user-id, password, OTP (if applicable)]
  + upon successful login, redirect to the page intended
  + upon failure, redirect to exception processing (retry, forgot password or register)
* Upon clicking the Profile Management Button
  + Show the personal information collect and allow options for editing (name, address, DoB, current password, preferences)
  + Mandate upload option for id proof (and/or address proof) for name, DoB and address changes.
  + Upon saving show the updated details (indicating the fields pending KYC approvals)
* Upon clicking the Wallet Button
  + display the current wallet balance and the save source of funds
  + allow funding of wallet from saved details
    - Savings Account
    - Credit Card
  + provide option to fund from a new source and save details
  + display the updated wallet balance
* Upon clicking the Bookings Button
  + Show the previous reservation and for each item in the list, provide options to
    - click and view additional information (train, date & time, destination, passengers, etc.)
  + allow an option to make a new reservation (temporarily disabled [under construction) – enabled for Sprint-2]
  + allow the option to edit the current reservation to cancel or change date based on availability (temporarily disabled [under construction) – enabled for Sprint-2]

**Sprint-2**: Payment from wallet should be enabled for purchases.

* Manage reservation
  + Upon clicking to make a new Booking or edit the current reservation
    - Show parameters for search for selection (train, date & time, destination, etc.)
    - Upon entering the parameters, allow search
  + Upon displaying results
    - Allow clicking on item to show more details (display train, date & time, destination, passengers, etc.)
  + Process reservation
    - Make a reservation and ask if more items need to be Booked (or)
    - Change the date on an existing booking if the date is available (or)
    - Cancel an existing reservation
  + Upon making (or cancelling) of a reservation, charge (or pay refund), allowing payment from (or to)
    - Wallet
    - Savings Account
    - Credit Card
  + If the wallet does not have sufficient funds, allow partial billing of the remaining amount from other sources
  + Upon completion of the payment, provide an option give feedback on the experience, etc.

# Chat Application

**Sprint-1:** Setup required for managing a chat application, to be used by an end-user as an APP.

* Manage the header functions
  + Login Management
  + Profile Management
  + Group Management
* Upon clicking on login button or any button that requires the customer to be logged-in
  + open the login/register page
  + enable logging-in [user-id, password, OTP (if applicable)]
  + upon successful login, redirect to the page intended
  + upon failure, redirect to exception processing (retry, forgot password or register)
* Upon clicking the Profile Management Button
  + Show the personal information collect and allow options for editing (name, address, DoB, current password, preferences)
  + Mandate upload option for id proof (and/or address proof) for name, DoB and address changes.
  + Upon saving show the updated details (indicating the fields pending KYC approvals)
  + display the updated wallet balance
* Upon clicking the Groups Button
  + Show the groups that a person belongs to
    - click and view additional information (other people in the group, admin, etc.)
  + allow an option to make a new group (temporarily disabled [under construction) – enabled for Sprint-2]
  + allow the option to initiate a chat (temporarily disabled [under construction) – enabled for Sprint-2]

**Sprint-2**: Manage a chat application.

* Manage groups
  + Upon displaying groups that the user is a part of
    - Allow clicking on item to show more details (displaying other users, admin, etc.)
  + Process Group
    - Create a new group and invite others to join (or)
    - Invite others to join an existing group (or)
    - Exit from a group
  + Upon making the changes save and go into chat mode.
* Chat Mode
  + On clicking the chat tab
    - Show the list of available chats
    - Provide a search button to search for an user or a group
  + On clicking on an available chat (or) selecting a user/group from a search
    - Enter the chat window
    - Show previous chat history if an existing chat is selected
    - Allow a new message to be typed and sent to the user/group
  + On login on as another user
    - The most recent message typed by the previous user should be seen as a chat entry
* **Important considerations**
  + Groups should be linked to users
  + Each user by himself/herself, is a group of 1 member
  + Message should be linked to groups and not users
  + Each user should have a separate list of ‘friends’ who can be added to groups
  + Some users should have ‘common friends’ so that groups can be created

# Email Application

**Sprint-1:** Setup required for managing an email application, to be used by an end-user as an APP.

* Manage the header functions
  + Login Management
  + Profile Management
  + Address-book Management
* Upon clicking on login button or any button that requires the customer to be logged-in
  + open the login/register page
  + enable logging-in [user-id, password, OTP (if applicable)]
  + upon successful login, redirect to the page intended
  + upon failure, redirect to exception processing (retry, forgot password or register)
* Upon clicking the Profile Management Button
  + Show the personal information collect and allow options for editing (name, address, DoB, current password, preferences)
  + Mandate upload option for id proof (and/or address proof) for name, DoB and address changes.
  + Upon saving show the updated details (indicating the fields pending KYC approvals)
  + display the updated wallet balance
* Upon clicking the Address-book Button
  + Show the contacts that a user has store
    - click and view additional information (name, email, contact information, etc.)
  + allow an option to add a new contact (temporarily disabled [under construction) – enabled for Sprint-2]
  + allow the option to initiate an email (temporarily disabled [under construction) – enabled for Sprint-2]

**Sprint-2**: Manage an email application.

* Manage contacts
  + Upon displaying the available contacts
    - Allow clicking on item to show more details (displaying name, email, contact information, etc.)
  + Process Contact
    - Create a new contact (or)
    - Update and existing contact (or)
    - Delete a contact
  + Upon making the changes save and go into email mode.
* Email Mode
  + On clicking the email tab
    - Show the list of emails (read/unread/drafts)
    - Provide a search button to search for an email from a particular contact
  + On clicking on an available email (or) selecting a contact from a search
    - Enter the email window
    - Show previous email trail (history) if an existing email is selected
    - Allow a new email to be typed and sent to the contact
  + On login on as another user
    - The most recent email typed by the previous user should be seen as an email entry
* **Important considerations**
  + Each user should have a separate list of ‘contacts

# Student Engagement Application

**Sprint-1:** Setup required for managing a student engagement application, to be used by teacher and students as an APP.

* Manage the header functions
  + Login Management
  + Profile Management
  + Setup (Course/Teacher/Student) Management
* Upon clicking on login button or any button that requires the customer to be logged-in
  + open the login/register page
  + enable logging-in [user-id, password, OTP (if applicable)]
  + upon successful login, redirect to the page intended
  + upon failure, redirect to exception processing (retry, forgot password or register)
* Upon clicking the Profile Management Button
  + Show the personal information collect and allow options for editing (name, address, DoB, current password, preferences)
  + Mandate upload option for id proof (and/or address proof) for name, DoB and address changes.
  + Upon saving show the updated details (indicating the fields pending KYC approvals)
  + display the updated wallet balance
* Upon clicking the Setup Button
  + Only certain users will have access to click this button
    - A list of all courses should be shown
    - Click on each course to show additional information (teacher linked to each course, the students enrolled, the periods assigned in a week, etc.)
  + Note: this can be a display only list [edit option can be enabled for a future Sprint, say Sprint-3]

**Sprint-2**: Manage a course.

* Teacher Login
  + Upon Login the teacher can see the following options
    - A list of students - Allow clicking on student to show more details (displaying name, email, contact information, how each student has performed in the list of assignments/test etc.)
    - A list of assignments/test - Allow clicking on it to show more details [displaying description, list of students (indicating whether they have completed the assignment/test, marks obtained, etc.)]
    - Allow the teacher to open the assignment attachments uploaded by the students and grade the same in the system and also enter marks for a test that has been conducted.
    - Enable the teacher to create a new assignment and upload an assignment online for the students to complete
* Student Login
  + Upon Login the student can see the following options
    - A list of assignments/test - Allow clicking on it to show more details [displaying description, indicating whether the student has completed the assignment/test, marks obtained, etc.)]
    - Enable the student to upload an assignment online for pending assignment submissions.