# **Software Requirements Specifications**

# **MEME**

# (Mall Entertainment Made Easy) Version 1.0

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## 1. The Purpose of the Product

#### 1a. Project Background

MEME is a centralized platform for accessing all the mall services. It is a smart service management solution making mall experience more convenient for the users. Customers can access all the services they need in one place, eliminating their need to go from one location to another within the mall. Mall management in real life can be a tedious task. Malls often face difficulties in allocating resources such as parking spaces, movie tickets, and gaming zones without a centralized management system. This could be the reason why we see large crowds, especially during the peak hours. With all the services in one destination, it becomes easier for mall management to coordinate and supervise different services, reducing wait times and improving efficiency.

#### 1b. Goals

Mall Entertainment Made Easy is a web application that aims to provide various services like parking services, movie ticketing system, food pre order services, Gaming zone administration, Event updates, Flash deals, Mall store specifics and job opportunities. One of the most common issues that customers face in the malls is traffic congestion in parking and during peak times parking slots may also not be available. Long lines and wait times at the movie theaters and restaurants can also be frustrating for customers. To address these issues, we have developed a web application where the customer's overall mall experience is made easy and hassle free. Mall store specifics have been designed in our web application to help the customers to navigate the mall more easily and to discover new stores and products. We have also provided various additional services like Gaming Zone Administration, information on event updates, flash deals and job opportunities to improve customer experience and satisfaction, improve the efficiency and to strengthen the malls over all reputation.

## 2. User Characteristics

#### 2a. Users:

There are 3 users who can access our MEME web application:

- **1. Customer:** Customers are the users who will be able to view all the services that are provided in the application without being registered.
- **2. Registered Customer:** Registered customers are the user who will be able to view and access all the services after successful login.
- **3. Admin:** Admin is the website administrator who can manage the services that are provided.

#### 2b. User characters of the users

#### 1. Customer:

- 1. Customer can create an account by giving the basic details.
- 2. Customer can access the services based on their requirements.
- 3. Customer can view the movies that are currently streaming.
- 4. Customer can view the parking lot details.
- 5. Customer can view all the events happening in the mall.
- 6. Customer can view all the active deals.
- 7. Customer can view all the food stalls and their respective menus.
- 8. Customer can view the mall store specifics.
- 9. Customer can view the games and their details.
- 10. Customer can view the job openings that are available in the mall.

#### 2. Registered Customer:

- 1. Registered customer can login to the application and update the profile details.
- 2. Registered customer can access the services based on their requirements.
- 3. Registered customer can view the movies that are streaming and book the tickets.

- 4. Registered customer can view the parking lot details and book the parking space.
- 5. Registered customer can view all the deals and events held in the mall.
- 6. Registered customer can view all the food stalls, food menus and can pre-order the food.
- 7. Registered customer can view the store details that are in the mall.
- 8. Registered customer can view the games and recharge their gaming card.
- 9. Registered customer can view the job openings that are available in the mall.

#### 3. Admin:

- 1. Admin can handle the database and provide access to the website if the user faces any problem in login or signup.
- 2. Admin can add, view, delete and update the movie details such as movie title, price, number of seats, duration, genre and can also view the movie booking history.
- 3. Admin can add, view, delete and update the parking lot details such as name, address, number of parking spaces available and can also view the parking booking history.
- 4. Admin can add, view, delete and update the stores available and their details.
- 5. Admin can add, view, delete and update the events that are held in the mall.
- 6. Admi can add, view, delete and update the job availabilities in the mall.
- 7. Admin can add, view, delete and update the deals.
- 8. Admin can add, view, delete and update the games.
- 9. Admin can add, view, delete and update the food stall and food menu details.
- 10. Admin can accept the order and send order status to the customer.

## 3. Mandated Constraints

This section describes constraints on the requirements and the eventual design of the product.

#### 3a. Solution constraints

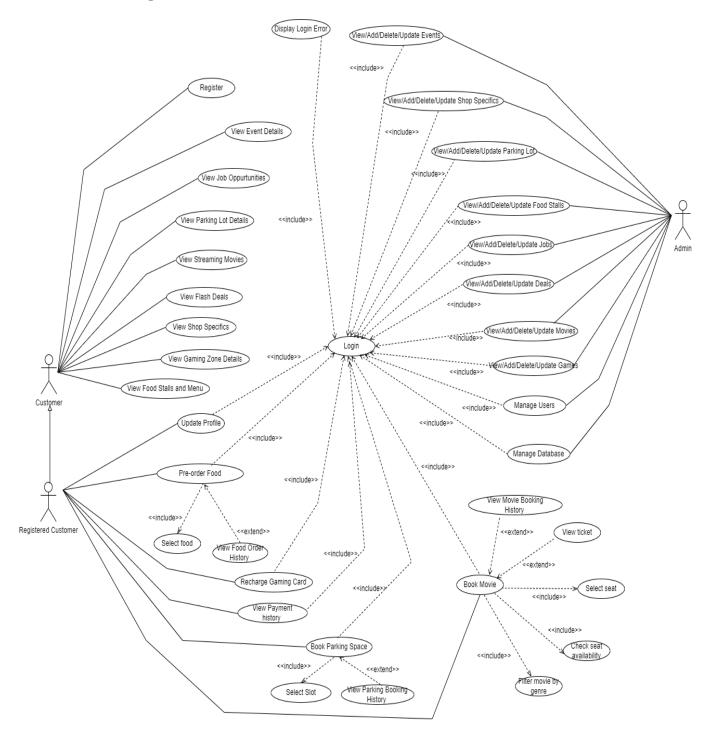
- 1. The application is made to function in the web browser.
- 2. The user using this application should have a web browser that supports HTML, CSS, and JAVASCRIPT.
- 3. The machine which is used by the user to run this application must be connected to the internet.

## 3b. Implementation Environment

- 1. The product shall run on an existing network of personal systems.
- 2. Operating system: Any operating system that supports web browsing.
- 3. Database: MySQL Workbench.
- 4. Languages: HTML, CSS, Java & JavaScript.
- 5. Sprint Tool suite is used to run the application.

# 4. The Scope of the Product

## 4a. Use case Diagram



## 4b. Use Case Table

Use Case ID	Use Case Name	Actor(s)	Input or Output
001	Login	Admin, Registered Customer	I/P: Admin and Registered Customer must provide the valid credentials to login to the application. O/P: After successful login, the application is redirected to home page.
002	Display Login Error	Admin, Registered Customer	I/P: When the non-registered user or a registered user gives the invalid credentials while login.  O/P: Error Message should be properly displayed if there is any error with the user credentials.
C01	Register	Customer	I/P: Customer should enter all the required details to register.  O/P: Customer should be able to login upon registration.
RCC01	View Event Details	Customer, Registered Customer	I/P: Actors should be able to navigate to the events page. O/P: Actors should be able to view all the events and their details.
RCC02	View Job Opportunities	Customer, Registered Customer	I/P: Actors should be able to navigate to the jobs page. O/P: Actors should be able to view all the job openings.
RCC03	View Parking Lot Details	Customer, Registered Customer	I/P: Actors should be able to navigate to the parking space booking page. O/P: Actors should be able to view all the parking lot details.

RCC04	View Streaming Movies	Customer, Registered Customer	I/P: Actors should be able to navigate to the movie booking page.  O/P: Actors should be able to view the details of all the streaming movies.
RCC05	View Flash Deals	Customer, Registered Customer	I/P: Actors should be able to navigate to the deals page. O/P: Actors should be able to view all the flash deals in the mall.
RCC06	View Shop Specifics	Customer, Registered Customer	I/P: Actors should be able to navigate to the shop specifics page.  O/P: Actors should be able to view all the shop details.
RCC07	View Gaming Zone Details	Customer, Registered Customer	I/P: Actors must be able to navigate to the gaming zone page.  O/P: Actors must be able to view details of all the available games.
RCC08	View food stalls and menu	Registered Customer	I/P: Registered customers should be able to navigate to the pre-order food.  O/P: Registered customer should be able to view the food stalls and menus successfully.
RC01	Update profile	Registered Customer	Registered customers should be able to update profile successfully.
RC02	Pre-order food	Registered Customer	I/P: Registered customers should be able to navigate to the pre-order food page.  O/P: Registered customer should be able to pre-order food successfully.

RC03	Select food	Registered Customer	I/P: Registered customers should be able to navigate to the pre-order food page and select food.  O/P: Registered customer should be able to select food successfully.
RC04	View Food Order history	Registered Customer	I/P: Registered customer should be able to navigate to the food order history page.  O/P: Registered customer should be able to view food order history.
RC05	Recharge Gaming Card	Registered Customer	I/P: Registered customer should be able to navigate to gaming page.  O/P: Registered customer should be able to recharge gaming card successfully.
RC06	View Payment history	Registered Customer	I/P: Registered customer should navigate to payment history page.  O/P: Registered customer should able to view payment history.
RC07	Book Parking Space	Registered Customer	I/P: Registered customer should be able to navigate to book parking space page. O/P: Registered customer should be able to book the selected parking space successfully.
RC08	Select slot	Registered Customer	I/P: Registered customer should be able to navigate to book parking space page and select the parking space.  O/P: Registered customer should be able to select the parking slot successfully.
RC09	View Parking Booking History	Registered Customer	I/P: Registered customer should navigate to the parking booking history page.

			O/P: Registered customer should be able to view the parking booking history successfully.
RC10	Book Movie	Registered Customer	I/P: Registered customer should be able to navigate to the movie booking page and book the movie ticket.  O/P: Registered customer should be able to book ticket for the selected movie successfully.
RC11	Filter Movie by genre	Registered Customer	I/P: Registered customer should be able to navigate to the movie booking page and filter the movie by genre.  O/P: Registered customer should be able to filter movie by genre successfully.
RC12	Check Seat availability	Registered Customer	I/P: Registered customer should be able to navigate to the movie booking page and check seat availability for movies.  O/P: Registered customer should be able to check seat availability for movies successfully.
RC13	Select Seat	Registered Customer	I/P: Registered customer should be able to navigate to the movie booking page and select seat.  O/P: Registered customer should be able to select seat successfully.
RC14	View Ticket	Registered Customer	I/P: Registered customer should be able to navigate to the movie booking page and view ticket.  O/P: Registered customer should be able to view the movie ticket successfully.

RC15	View Movie Booking History	Registered Customer	I/P: Registered customer should navigate to book movie to view movie booking history page.  O/P: Registered customer should be able to view the movie booking history successfully.
A01	View/Add/Delete/Update Events	Admin	I/P: Admin should be able to navigate to the events page and view/add/delete/update events successfully.  O/P: The changes made, should be reflected on the events page.
A02	View/Add/Delete/Update Shop Specifics	Admin	I/P: Admin should be able to navigate to the shop specifics page and view/add/delete/update shops specific details successfully.  O/P: The changes made, should be reflected on the shop specifics page.
A03	View/Add/Delete/Update Parking Lot	Admin	I/P: Admin should be able to navigate to the parking page and view/add/delete/update parking lots successfully.  O/P: The changes made, should be reflected on the parking lot page.
A04	View/Add/Delete/Update Food Stalls	Admin	I/P: Admin must be able to navigate to the food page and view/add/delete/update food stalls successfully.  O/P: The changes made, should be reflected on the food stalls page.
A05	View/Add/Delete/Update Jobs	Admin	I/P: Admin should be able to navigate to the job opportunities page and view/add/delete/update job details successfully.

A06	View/Add/Delete/Update Deals	Admin	O/P: The changes made, should be reflected on the jobs page.  I/P: Admin should be able to navigate to the deals page and view/add/delete/update deals successfully.
			O/P: The changes made, should be reflected on the deals page.
A07	View/Add/Delete/Update Movies	Admin	I/P: Admin should be able to navigate to the movie page and view/add/delete/update movie details successfully.  O/P: The changes made, should be reflected on the movies page.
A08	View/Add/Delete/Update Games	Admin	I/P: Admin should be able to navigate to the gaming page and view/add/delete/update games details successfully.  O/P: The changes made, should be reflected on the games page.
A09	Manage Users	Admin	Admin should be able to manage all the registered users of the application.
A10	Manage Database	Admin	Admin should be able to access and can perform the CRUD operations on the database.

## 5. Functional and Non- Functional Requirements

## 5a. Functional Requirements.

## **Requirement Shell**

## **Requirement Shell**

<u>Description</u>: The login page should authenticate users by verifying their username and password against database.

<u>Rationale</u>: This feature provides a mechanism for user authentication ensuring that only authorized users can access the website.

#### Fit Criterion:

- 1. Login page should verify the user credentials against database and grant the access based on user role.
- 2. Login page should provide 'Invalid Credentials' as an error message upon entering incorrect login credentials.
- 3. After successful login, the website should redirect to the home page.

<u>Dependencies</u>: Prior sign-up is required in order to login.

<u>Supporting Materials</u>: Team I documents.

History: Created by Kavya Sree Katakam

Requirement #: User Registration Event/Use Case #: C01

<u>Description</u>: Sign-up feature should allow new users to create an account by providing their basic information such as name, email, password, phone number.

<u>Rationale</u>: This feature provides a mechanism for collecting user data to authenticate the user credentials.

#### Fit Criterion:

- 1. Using the registration page, the system will receive the user details and store them in the database.
- 2. The details the user provides should be stored and retrieved while implementing login component.
- 3. After successful registration, the user will be allowed to login.
- 4. Email Id should be unique for each user.

<u>Dependencies</u>: The registration feature depends on a database management system to store user data and provide efficient access to the application.

Supporting Materials: Team I documents.

<u>History</u>: Created by Kavya Sree Katakam

Requirement #: View and Update

Event/Use Case #: RC01

profile.

<u>Description</u>: View and Update profile should allow the user to view and update their profile information.

<u>Rationale</u>: View and Update profile option enables the user to view and edit their personal information at any point of time.

#### Fit Criterion:

- 1. The user should be able to add or edit the information from their profile.
- 2. For a registered user, Email Id is a read-only field.

<u>Dependencies</u>: The registration feature depends on a data base management system to store user data and provide efficient access to the application.

<u>Supporting Materials</u>: Team I documents.

<u>History</u>: Created by Kavya Sree Katakam

## **Requirement Shell**

Requirement #: Add users (Admin). Event/Use Case #: A09

<u>Description</u>: Add users option should allow the admin to add a particular user.

<u>Rationale</u>: This feature provides a mechanism for creating a user account from admin end.

#### Fit Criterion:

- 1. Add user will add a particular user by providing information such as Name, Phone Number, Email Id.
- 2. The Email Id should be unique to register a new user.

<u>Dependencies</u>: The user must login as an admin to access this option.

Supporting Materials: Team I documents.

<u>History</u>: Created by Kavya Sree Katakam

## **Requirement Shell**

Requirement #: View users (Admin). Event/Use Case #: A09

<u>Description</u>: View users option should allow the admin to view/ edit/ delete the information of registered users.

<u>Rationale</u>: View users option provides a mechanism to edit and delete the user data form admin end.

#### Fit Criterion:

- 1. If the user login as an admin, view users option should allow the admin to view the list of registered users.
- 2. This feature should allow the admin to modify the information of registered users.
- 3. This feature should keep track of all the changes made to the data and reflect them on the customer end accordingly.

<u>Dependencies</u>: The user must login as an admin to access this option.

<u>Supporting Materials</u>: Team I documents.

<u>History</u>: Created by Kavya Sree Katakam

## **Requirement Shell**

<u>Description</u>: View Movies List option should allow the user to view a list of all the movies streaming in the theatre.

Rationale: View Movies List option should enable the users to view the latest releases.

#### Fit Criterion:

- 1. View Movies List page on the customer end allows the user to view a list of all the movies streaming in the theatre and respective movie details.
- 2. Search option should enable the user to filter the movies by genre.
- 3. Movies added by the admin should be reflected on both customer and admin ends in this feature.

<u>Dependencies</u>: Admin must add the movies in order to view them on both customer and admin end.

<u>Supporting Materials</u>: Team I documents.

History: Created by Kavya Sree Katakam

## **Requirement Shell**

Requirement #: Book movie tickets Event/Use Case #: RC10/RC11/RC12/RC13

<u>Description</u>: Book movie tickets option should allow the user to book a movie ticket.

Rationale: This option is useful to choose the seats and book tickets.

#### Fit Criterion:

- 1. Book tickets option must display all the streaming movies along with the show timings.
- 2. Check availability option shows the available and booked seats.
- 3. On selecting a show time and clicking the book option, user should be able to view a seating chart showing reserved and available seats.
- 4. Upon filling in all the required details, user can book the movie tickets.

## Dependencies:

- 1. Admin must add the movies and its details.
- 2. Login is mandatory to book the movie tickets.

Supporting Materials: Team I documents.

History: Created by Kavya Sree Katakam

## **Requirement Shell**

Requirement #: View/Add/ Update/Delete

movies (Admin)

Event/Use Case #: A07

Description: Admin should be able to update the movies and its details.

<u>Rationale</u>: View, Add, Update, Delete options provide a mode to add and modify the movies.

#### Fit Criterion:

- 1. Admin should be able to enter the title and description of the movie and meta data such as genre and ticket price.
- 2. Admin should be able to edit the movie details that has already been added to the system.
- 3. Admin should be able to view and delete the movies added.

<u>Dependencies</u>: The user must login as an admin to access these options.

Supporting Materials: Team I documents.

History: Created by Manojna Borra

Requirement #: Movies Booking

Event/Use Case #: RC15

History

<u>Description</u>: Booking History should display the history of all the bookings along with the user details.

Rationale: Book History provides a report of previous bookings.

#### Fit Criterion:

1. User as an admin should be able to view the history of the movie bookings of all users.

2. User as a customer should be able to view their previous booking details.

<u>Dependencies</u>: The booking history feature requires data of bookings made through the book ticket feature.

Supporting Materials: Team I documents.

History: Created by Manojna Borra

## **Requirement Shell**

Requirement #: View Parking Lot Event/Use Case #: RCC03

<u>Description</u>: View Parking Lot should display the parking lots.

<u>Rationale</u>: View Parking Lot should allow the users to view the parking lot and to select the parking space in real-time.

#### Fit Criterion:

1. View Parking Lot page on the customer end allows the user to view a list of all the parking lots.

2. Parking lots added by the admin should be reflected on both customer and admin ends

in this feature.

- 3. View option in this page will redirect the application to a page where the user can view all the available parking spaces.
- 4. User as an admin has the authority to mark a parking space available.

#### Dependencies:

- 1. Admin must add the parking lot and its details.
- 2. The parking space availability status is updated based on the booking time.

Supporting Materials: Team I documents.

History: Created by Manojna Borra

## **Requirement Shell**

Requirement #: Book a parking

Event/Use Case #: RC07/RC08

space

<u>Description</u>: Book a parking space should allow the user to book parking spaces online.

<u>Rationale</u>: Book a parking space should allow the users to select the parking space based on date and time.

#### Fit Criterion:

- 1. Book a parking space feature should allow the user to reserve a selected parking space by filling in the details like date and time of parking and other meta data.
- 2. This option should allow the users to select the date and time of the parking reservation.
- 3. Upon clicking the view option, the user will be able to view available and booked parking spaces.
- 4. Upon filling all the required details, user can book the parking spaces.

<u>Dependencies</u>: Login is mandatory in order to book a parking space.

Supporting Materials: Team I documents.

**History**: Created by Manojna Borra

## **Requirement Shell**

Requirement #: View/Add/ Update/Delete

parking lot (Admin)

Event/Use Case #: A03

Description: Admin should be able to update the parking lot and parking spaces.

<u>Rationale</u>: View, Add, Update, Delete options provide a mode to add and modify the parking lot and spaces.

#### Fit Criterion:

1. Admin should be able to enter the name, address of the parking lot and number of parking spaces.

2. Admin should be able to edit the parking lot details and update the number of parking spaces that has already been added to the system.

3. Admin should be able to view and delete the parking lot added.

<u>Dependencies</u>: The user must login as an admin in order to access these options.

Supporting Materials: Team I documents.

History: Created by Manojna Borra

Requirement #: Parking Booking

Event/Use Case #: RC09

History

<u>Description</u>: Parking Booking History should display the history of all the parking bookings along with the user details.

Rationale: Book History for parking provides a report of previous parking bookings.

#### Fit Criterion:

1. User as an admin should be able to view the history of the parking bookings of all users.

2. User as a customer should be able to view their previous parking booking details.

<u>Dependencies</u>: The booking history feature requires data of bookings made through the book parking space feature.

<u>Supporting Materials</u>: Team I documents.

History: Created by Manojna Borra

## **Requirement Shell**

Requirement #: View Food stalls and

Event/Use Case #: RCC08

display food menu

<u>Description</u>: View Food stalls option should allow the users to view the food stalls and display menu in the food pre order page.

<u>Rationale</u>: View Food stalls option will allow the users to view multiple food stalls present in the mall.

#### Fit Criterion:

- 1. View Food stalls should display the food stalls.
- 2. Upon selecting a food stall, a menu should be displayed with images and descriptions of each item.

<u>Dependencies</u>: Admin must add the food stalls and menu on admin end for customer to view them.

Supporting Materials: Team I documents.

History: Created by Manojna Borra

## **Requirement Shell**

Requirement #: Order food Event/Use Case #: RC02/RC03

<u>Description</u>: Order food option should allow the user to order food online from anywhere and pick it up in the mall.

<u>Rationale</u>: Order food option will provide convenience to the users to order food avoiding queues.

#### Fit Criterion:

- 1. User must be able to customize their order such as selecting different food items.
- 2. After selecting items from the menu, the user must be able to check out the food items and place the order.
- 3. Upon placing the order, user should receive a confirmation message.
- 4. After the order is ready, user should receive 'Ready to pick up' message.

## Dependencies:

1. Login is mandatory to place the food order.

2. Order confirmation message and ready to pick status should be sent/updated from the admin.

Supporting Materials: Team I documents.

**History**: Created by Charan Kasala

## **Requirement Shell**

Requirement #: View/Add/ Update/Delete food

Event/Use Case #: A04

stalls and menu (Admin)

<u>Description</u>: Admin should be able to add/update/delete the food stalls and its menu.

Rationale: View, Add, Update, Delete options provide a mode to add and modify

the food stalls and the menu.

#### Fit Criterion:

1. These features allows admin to make updates to the food and its menu.

2. Admin must add new food information, remove unavailable food items.

3. Admin must view all the added and modified food stalls and items.

<u>Dependencies</u>: The user must login as an admin to access these options.

Supporting Materials: Team I documents.

History: Created by Charan Kasala

## **Requirement Shell**

Requirement #: Order tracking (Admin) Event/Use Case #: A04

Description: Order tracking should allow the admin to track the orders placed by users.

<u>Rationale</u>: Order tracking will allow the users to manage orders and track the status of each order.

#### Fit Criterion:

- 1. Admin must be able to receive all the orders placed and manage them efficiently.
- 2. Admin must be able to change the order status accordingly.

#### Dependencies:

- 1. The user must login as an admin to access the order tracking process.
- 2. User must order the food for the admin to track it.

<u>Supporting Materials</u>: Team I documents.

**History**: Created by Charan Kasala

## **Requirement Shell**

Requirement #: View Games Event/Use Case #: RCC07

<u>Description</u>: View Games option should display the games available in the gaming zone.

<u>Rationale</u>: View Games option displays a variety of games to choose from, to attract users with different interests.

#### Fit Criterion:

- 1. View Games page will allow the user to view a list of all the games.
- 2. This option should also show game description and price of each game.

<u>Dependencies</u>: Admin must add the games and its details.

Supporting Materials: Team I documents.

<u>History</u>: Created by Charan Kasala

Requirement #: Recharge the gaming

card.

Event/Use Case #: RC05

<u>Description</u>: Recharge card option should allow the user to recharge their gaming card.

<u>Rationale</u>: Recharge card option will enable the user to purchase virtual gaming currency.

#### Fit Criterion:

1. The user must be able to enter the amount that the user wishes to add to the card.

2. Upon submitting the amount, the card should be recharged with that amount.

<u>Dependencies</u>: Each recharge card should have a unique id.

Supporting Materials: Team I documents.

**History**: Created by Charan Kasala

## **Requirement Shell**

Requirement #: View/Add/ Update/Delete

games (Admin)

Event/Use Case #: A08

<u>Description</u>: Admin should be able to add/update/delete the games and its details.

<u>Rationale</u>: View, Add, Update, Delete options provide a mode to add and modify the games and the details.

#### Fit Criterion:

1. Admin must view, add new games, remove unavailable games.

2. These features allow admin to make updates to the game descriptions and prices.

<u>Dependencies</u>: The user must login as an admin in order to access these options.

Supporting Materials: Team I documents.

**History**: Created by Charan Kasala

## **Requirement Shell**

Requirement #: View Shop

Event/Use Case #: RCC06

specifics

<u>Description</u>: View Shop specifics option should display the shops available and the shop specific details.

<u>Rationale</u>: View Shop specifics provides an easy interface for the users to view the shop information.

#### Fit Criterion:

- 1. View Shop specifics will list all the available shops in the mall.
- 2. Upon selecting a shop, its details such as shop name, timings, open/closed status, contact information should be displayed.

#### Dependencies:

- 1. Admin must add the shops and its details.
- 2. Admin must keep the shop specifics up to date to ensure the customer gets the accurate information.

Supporting Materials: Team I documents.

History: Created by Charan Kasala

## **Requirement Shell**

Requirement #: View/Add/ Update/Delete shop specifics (Admin) Event/Use Case #: A02

<u>Description</u>: Admin should be able to view/add/update/delete the shops and its details.

<u>Rationale</u>: View, Add, Update, Delete options provide a mode to add and modify the shops and the details.

#### Fit Criterion:

- 1. Admin must view all the shops and add new shops.
- 2. These features allow admin to make modifications to the shop details when a shop is vacated or removed.

<u>Dependencies</u>: The user must login as an admin in order to access these options.

Supporting Materials: Team I documents.

History: Created by Vamsi Krishna Changala

## **Requirement Shell**

Requirement #: View

Event/Use Case #: RCC01

**Events** 

<u>Description</u>: View events option should display the happening events in the mall.

<u>Rationale</u>: View Events option will improve the user experience making it more convenient for the user, to view the events they want.

#### Fit Criterion:

- 1. View events will list all the events happening in the mall.
- 2. Upon selecting an event, its details such as event name, timings, venue should be displayed.

## **Dependencies**:

- 1. Admin must add the events and its details.
- 2. Admin must keep the event information up to date to ensure the customer gets the accurate information.

Supporting Materials: Team I documents.

History: Created by Vamsi Krishna Changala

## **Requirement Shell**

Requirement #: View/Add/ Update/Delete

Event/Use Case #: A01

Events (Admin)

<u>Description</u>: Admin should be able to view/add/update/delete the events and its details.

<u>Rationale</u>: View, Add, Update, Delete options provide a mode to add and modify the events and the details.

#### Fit Criterion:

1. View/ Add/ Update/Delete Events allows admin to make updates, add new information, remove outdated content related to happening events in the mall.

<u>Dependencies</u>: The user must login as an admin in order to access these options.

<u>Supporting Materials</u>: Team I documents.

<u>History</u>: Created by Vamsi Krishna Changala

## **Requirement Shell**

Requirement #: View Flash Deals Event/Use Case #: RCC05

<u>Description</u>: View Flash Deals option should display all the sales in the mall.

<u>Rationale</u>: View Flash Deals option will attract the customers and boost the sales in a short period of time.

#### Fit Criterion:

1. View Flash Deals will display all the flash deals related to all the shops in the mall.

<u>Dependencies</u>: Admin must maintain the information of the deals such that only the active and valid deals should be displayed.

Supporting Materials: Team I documents.

History: Created by Vamsi Krishna Changala

## **Requirement Shell**

Requirement #: View/Add/ Update/Delete

Event/Use Case #: A06

Flash Deals (Admin)

<u>Description</u>: Admin should be able to add/update/delete the deals.

<u>Rationale</u>: View, Add, Update, Delete options provide a mode to add and modify the deals.

#### Fit Criterion:

1. View/Add/Update/Delete Events allows admin to make updates, add new information, remove outdated deals related to shops in the mall by viewing all the data modified and added.

<u>Dependencies</u>: The user must login as an admin to access these options.

Supporting Materials: Team I documents.

History: Created by Vamsi Krishna Changala

Requirement #: View Job

opportunities

Event/Use Case #: RCC02

<u>Description</u>: Job opportunities option should display all the jobs openings in the mall.

<u>Rationale</u>: This feature will provide information about the open positions and help the employers to find potential job candidates.

#### Fit Criterion:

1. Job opportunities will display all the job openings and its details related to all the shops in the mall.

2. This feature also shows the contact information.

<u>Dependencies</u>: Admin must add the job openings and its description.

<u>Supporting Materials</u>: Team I documents.

History: Created by Vamsi Krishna Changala

## **Requirement Shell**

Requirement #: View/Add/ Update/Delete Job

Event/Use Case #: A05

opportunities (Admin)

<u>Description</u>: Admin should be able to add/update/delete the job openings.

<u>Rationale</u>: View, Add, Update, Delete options provide a mode to add and modify the job opportunities.

#### Fit Criterion:

1. View/Add/ Update/Delete Events allows admin to make updates, add new information, remove outdated information related to jobs.

<u>Dependencies</u>: The user must login as an admin to access these options.

Supporting Materials: Team I documents.

<u>History</u>: Created by Vamsi Krishna Changala

## Traceability matrix:

User story	User Profile	User story description	Requirements
US_1	Customer	Signup: Will be asked to provide certain details like first name, last name, middle name, phone number, gender, age.	C01
US_2	Registered Customer, Admin	Sign-In: Will be asked to provide username and password.	001
US_3	Registered Customer	Should be able to update his profile	RC01
US_4	Admin	Can view the list of all registered users and add new users.	A09
US_5	Admin	Movie Ticketing System: Should be able to add movie details like movie title, description, timings, duration, ticket price, language, genre.	A07
US_6	Admin	Movie Ticketing System: Should be able to update and delete the above movie details.	A07
US_7	Customer, Registered Customer	Movie Ticketing System: Should be able to filter the movie list based on genre.	RCC04
US_8	Registered Customer	Movie Ticketing System: Should be able to view booked and available seats.	RC12
US_9	Registered Customer	Movie Ticketing System: Should be able to select movie	RC13

US_10	Registered Customer	Movie Ticketing System: Should be able to book the ticket.	RC10
US_11	Registered Customer	Movie Ticketing System: Should be able to view booking history and booked tickets.	RC15
US_12	Admin	Parking Space Booking: Should be able to add the parking lot details(number of spaces and availability)	A03
US_13	Admin	Parking Space Booking: Should be able to update and delete the above details.	A03
US_14	Admin	Parking Space Booking: Should be able to view the current status of parking space bookings.	A03
US_15	Registered Customer	Parking Space Booking: Should be able to book the space of their choice	RC08
US_16	Customer, Registered Customer	Parking Space Booking: Should be able to view the parking lot and current status of spaces in parking lot.	RCC03
US_17	Registered Customer	Parking Space Booking: Should be able to provide start and end date with timings.	RC07
US_18	Registered Customer	Parking Space Booking: Should be able to view the parking booking history.	RC09
US_19	Admin	Food Pre-Order Service: Should be able to add/view/delete/update the food stalls and menu in the mall.	A04
US_20	Admin	Food Pre-Order Service: Should be able to receive, accept the order and send the confirmation message with order number.	A04
US_21	Admin	Food Pre-Order Service: Should be able to update the ready to pick status of the order.	A04

US_22	Customer, Registered Customer	Food Pre-Order Service: Should be able to view the food stalls	RCC08
	Registered Customer	and menu in the mall	
US_23	Registered Customer	Food Pre-Order Service: Should be able to select the items and checkout.	RC03
US_24	Registered Customer	Food Pre-Order Service: Should be able to place the order and receive a confirmation message with order number.	RC02
US_25	Admin	Gaming Zone: Should be able to add/view/delete/update the game details.	A08
US_26	Customer, Registered Customer	Gaming Zone: Should be able to view all the games, their details and price.	RCC07
US_27	Registered Customer	Gaming Zone: Should be able to recharge his card.	RC05
US_28	Admin	Shop Specifics: Should be able to add/view/delete/update the stores and map.	A02
US_29	Customer, Registered Customer	Shop Specifics: Should be able to view the stores and its details present in the mall.	RCC06
US_30	Admin	Events: Should be able to add/view/delete/update the events	A01
US_31	Customer, Registered Customer	Events: Should be able to view events and event details	RCC01
US_32	Admin	Job Opportunities: Should be able to add/view/delete/update the job	A05
US_33	Customer, Registered Customer	Job Opportunities: Should be able to view the job opportunities available in the mall.	RCC02
US_34	Admin	Flash Deals: Admin must be able to add/view/delete/update the deals.	A06

US_35	Customer,	Flash Deals:	RCC05
	Registered Customer	Should be able to view all the flash	
		deals	

## **5b) Non-Functional Requirements**

#### **Usability**

The application should have easy navigation, enabling the users to easily find the information they are looking for. All the sections including the menu options across the platform should have a consistent graphical user interface. The application must provide appropriate error messages on encountering mistakes along with instructions on how to rectify. Search options in the pages must help the users to quickly find required information. Users should also be able to access the application without having an account unless the user wishes to make purchases or a booking. The application should be easy to use for both end users and admin.

## **Performance Requirements**

The response time for an event:

- Viewing all the services and their respective functionalities should take less than a minute.
- Updating records like movie tickets, food details, and parking slots should be reflected in less than a minute.
- When the database is updated with new data like adding the movie, adding the parking slot, deleting the slot, or updating the food stalls or food menu, should be reflected on the application in less than 2 minutes.

## Throughput

The application should handle a high volume of transactions such as ticket sales, parking transactions, food services without significant delays and errors. MEME(application) should process heavy amounts of data from all the mall operations without significant lags and downtime. The application must enable the admin to manage the inventory levels in real time. The application should quickly respond to the user actions such as searching and filtering without any delay.

## Reliability

The application should be available and operational at all times in order to avoid interruptions in mall operations. The system should provide accurate and up to date information about the mall including store information, operation hours, promotions and events enabling the users to make informed decisions. The application should be able to handle increasing number of users and scale up or down as needed.