# Airline Seat Selection, Boarding pass issuance and Aircraft boarding

### **PROJECT**

# 19CSE314 – Software Engineering



Date: March 26, 2022

### **Group Details:**

S. No	Name of the Student	Roll No.
1.	PENUGONDA KOUSHIK	CB.EN.U4CSE19449
2.	RAVELLA ABHINAV	CB.EN.U4CSE19453
3.	ROHIT P M	CB.EN.U4CSE19454
4.	SINGADI SHANTHAN REDDY	CB.EN.U4CSE19459
5.	SINGAMANENI LIKHITHA	CB.EN.U4CSE19460

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### **ABSTRACT**

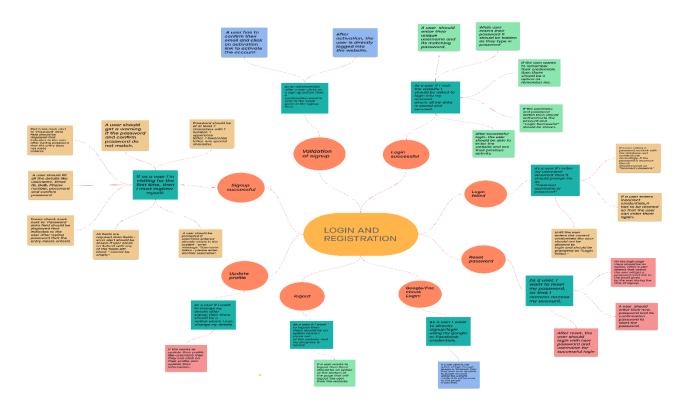
The objective of the project is to design an Airline Reservation System application that enables the passenger to search and book flight tickets which include boarding pass issuance, seat allocation. A reliable and predictable management system with respective operations is essential for aircraft trajectories. The airport management system is an all-in-one application for the complete flight experience, from booking a ticket to seat allocation. The application enables the users to get details regarding the timings of their flight, the boarding date, and also regarding the in-airport amenities such as restaurants, shopping centres, etc. This software has two parts. The first is the user part and the administrator part. The user part is used as a front end and the administrator is the back end. The administrator is used by the airline authority. It will allow the customers to access the database and allow new customers to sign up for online access. The system allows the airline passenger to search for flights that are available between the two travel cities, namely the "Departure city" and "Arrival city" for particular departure and arrival dates. The system displays all the flight's details such as flight no, name, price and duration of the journey, etc. After searching the system display list of available flights and allows the customer to choose a particular flight. Then the system checks for the availability of seats on the flight. If the seats are available then the system allows the passenger to book a seat. Otherwise, it asks the user to choose another flight. To book a flight the system asks the customer to enter his details such as name, address, city, state, credit card number, and contact number. Then it checks the validity of the card and book the flight and update the airline database and user database. The system also allows the customer to cancel his/her reservation if any problem occurs. The main purpose of this software is to reduce the manual errors involved in the airline reservation process and make it convenient for the customers to book the flights when they require such that they can utilize this software to make reservations, modify reservations or cancel a particular reservation.

## **Product Backlog**

### 1. Epic: User account registration and login

### **User Stories:**

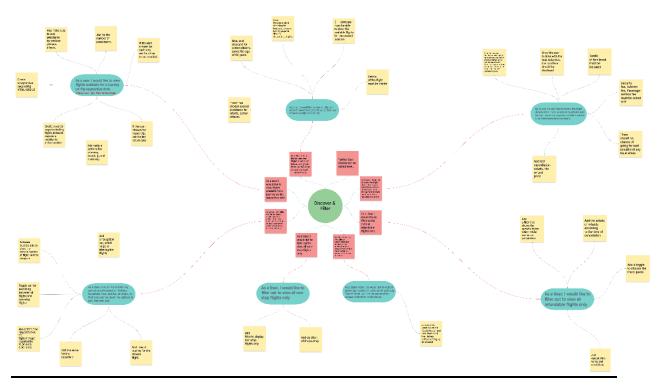
- 1. As a user, I would like to register myself when try to login for the first time.
- 2. As a user, If any of my credentials are entered wrong then it should be shown as login failed
- 3. As a user I want to update my details, after login.
- 4. As a user I want to directly signup/login using my google or Facebook credentials.
- 5. As a user if I want to logout then there should be an option where I come out of the website and my progress is saved.
- 6. As a user if I want to change my details after signup then there should be a option where I can change my details like username.



### 2. Epic: Discover & Filter

#### **User Stories:**

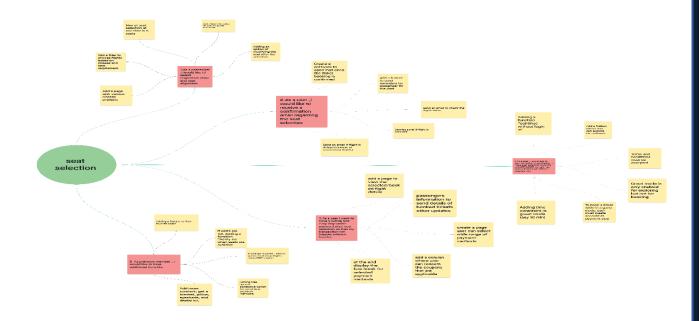
- 1. As a user, I would like to view flights available for journey on respective date.
- 2. As a User, I would like to view the flights in order of lowest to highest fares, so that i can choose my flight accordingly.
- 3. As a User, I would like to filter my search results on the basis of Airlines, Departure time and No. of stops, so that I can narrow down my options to pick the best one.
- 4. As a User, I would like to filter out to view all refundable flights only.
- 5. As a User, I would like to filter out to view all non-stop flights only.
- 6. As User, I would like to review the flight details after i have selected my choice and before I make the payment, so that I can be sure there have been no errors.
- 7. As a Stakeholder, we would like to collect passenger details of users booking through "Guest Mode" so that we can establish contact with them in the future.



### 3. Epic: seat selection

### **User Stories:**

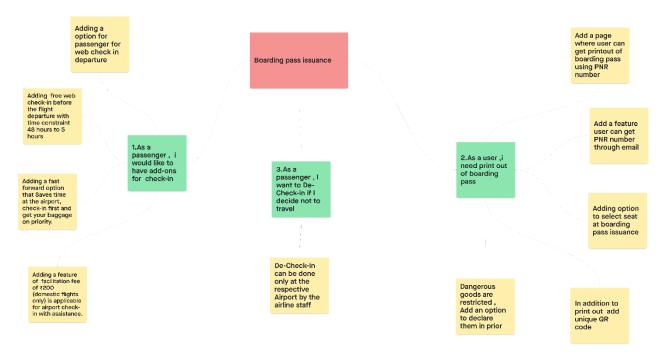
- 1. As a passenger, I would like to select respective class and seat alignment
- 2. As a user, I would like to receive a confirmation email regarding the seat selection
- 3. As a user, I would like to have an option of continuing to make seat selection/booking in GUEST MODE so that I can book a ticket even without singing in/up
- 4. As a user I want to have a subtle and easy way online payment after seat selection so that my transaction will happen without hassles
- 5. As premium member, I would like to have additional benefits



### 4.Epic: Boarding pass issuance

- 1.As a passenger, I would like to have add-ons for check-in
- 2.As a user, I need print out of boarding pass
- 3.As a passenger, I want to De-Check-in if I decide not to travel

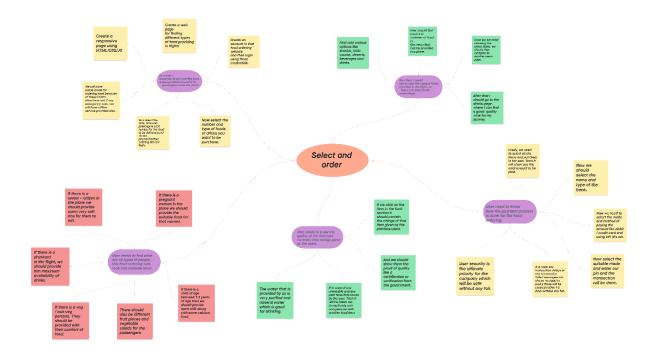
### **Chart:**



### 5. Epic: Select and order

#### **User stories:**

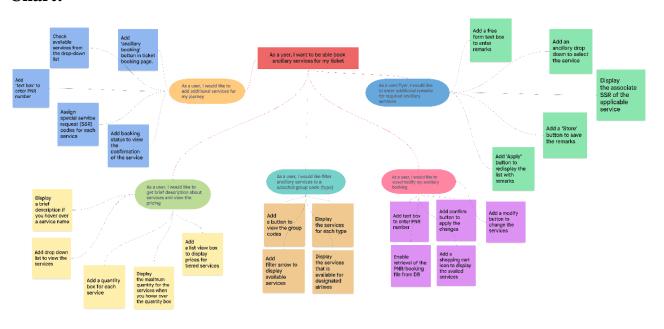
- 1. As a user, I would like to see how this food ordering website is useful for passengers inside the plane.
- 2. As a User, I would like to view the various foods provided in the flight, so that I can order them accordingly.
- 3. User needs to find what are all types of people, this food ordering web took into consideration.
- 4. User need to know how the payment process is done for the food ordering.
- 5. User needs to know the quality of the food and for every item rating given by the users.



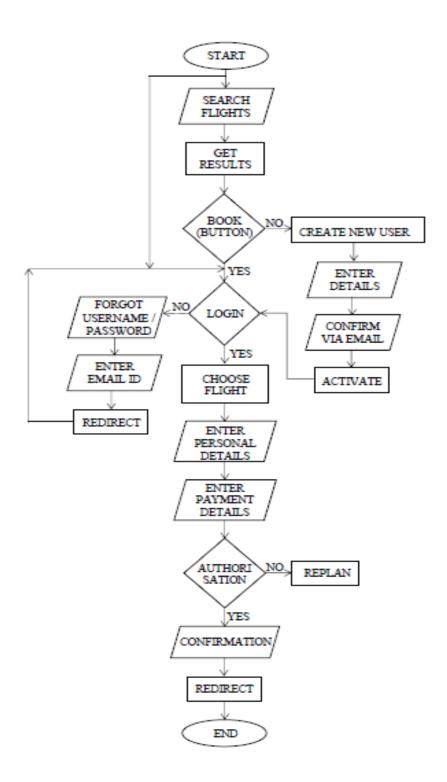
### 6. Epic: Ancillary services for my ticket.

### **User Stories:**

- 1. As a user, I would like to add additional services for my journey.
- 2. As a user, I would like to get brief description about services and view the pricing.
- 3. As a user, I would like filter ancillary services to a selected group code (type).
- 4. As a user/flyer, I would like to enter additional remarks for required ancillary services.
- 5. As a user, I would like to view/modify my ancillary booking.



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# Scrum activities – Sprint 1 Backlog

**Epic 1 (Estimate T-shirt size: 6)** 

**Story 1 (Estimate Story Points: 23)** 

### User account registration and login:

<b>User Story</b>	Member	Priority	Estimate
As a user, I would like to register myself when try to login for the first time.	S.Shantan Reddy	High	5
As a user, I would like to login into the account.	S.Shantan Reddy	Medium	4
As a user, If any of my credentials are entered wrong then it should be shown as login failed	S.Shantan Reddy	Medium	4
As a user if I want to logout then there should be an option.	Rohit P M	Low	2
As an Admin I want to have access to all the data from the database, So that I can add the data accordingly.	P.Koushik	Medium	4
As an Admin I want to update and delete the flight details and passenger details.	P.Koushik	Medium	4

# Epic 2 (Estimate T-shirt size: 6)

### **Story 2 (Estimate Story Points: 20)**

### **Discover & Filter:**

Task	Member	Priority	Estimate
As a user, I want to view flights available for journey on respective date so that I can select accordingly.	R Abhinav	High	5
As a User, I would like to view the flights in order of lowest to highest fares, so that I can choose my flight accordingly.	R Abhinav	Medium	4
As a User, I would like to filter my search results on the basis of Airlines, Departure time and No. of stops, so that I can narrow down my options to pick the best one.	P Koushik	Medium	3
As a User, I would like to filter out to view multi-city flights.	Rohit P M	Medium	2
As a User, I would like to filter out to view all non-stop flights only.	R Abhinav	Medium	4
As a Stakeholder, we would like to collect passenger details of users booking through "Guest Mode" so that we can establish contact with them in the future	Rohit P M	Medium	2

### **Epic 3 (Estimate T-shirt size: 3)**

**Story 2 (Estimate Story Points:** 13)

### **Seat Selection**

Task	Member	Priority	Estimate
As a passenger, I would like to select respective class and seat alignment	S Likhitha	Medium	3
As a user, I would like have a search history so that I can view my previous bookings	S Likhitha	High	5
As a user, i would like to wish list option so that i can add my bookings to cart	S Likhitha	High	5

### **Epic 4 (Estimate T-shirt size: 1)**

**Story 2 (Estimate Story Points: 5)** 

### **Ancillary Booking**

Task	Member	Priority	Estimate
As a user, I would like to add additional services for my journey	Rohit P M	High	5

### **STANDUP NOTES 1 on WEEK 1:**

Name	Question	Answer
	What did you do yesterday?	
SHANTHAN	What will you do today?	Discuss Epic ,User stories
SHANIHAN	Are there any impediments	None
	in your way?	
	What did you do yesterday?	
ABHINAV	What will you do today?	Discuss Epic ,User stories
ADIIINAV	Are there any impediments	None
	in your way?	
	What did you do yesterday?	
LIKHITHA	What will you do today?	Discuss Epic ,User stories
LIKIIIIIA	Are there any impediments	None
	in your way?	
	What did you do yesterday?	
KOUSHIK	What will you do today?	Discuss Epic ,User stories
KOOSIIIK	Are there any impediments	None
	in your way?	
ROHIT	What did you do yesterday?	
KOIII	What will you do today?	Discuss Epic ,User stories

### **STANDUP NOTES 2 on WEEK 2**

Name	Question	Answer
SHANTHAN	What did you do yesterday?	Improving on user stories
	What will you do today?	Installation and configuration of tools
SHANIHAN	Are there any impediments	Few paths related errors
	in your way?	
	What did you do yesterday?	Improving on user stories
ABHINAV	What will you do today?	Installation and configuration of tools
ADIIINAV	Are there any impediments	Few paths related errors
	in your way?	
	What did you do yesterday?	Improving on user stories
LIKHITHA	What will you do today?	Installation and configuration of tools
LIKIIIIIA	Are there any impediments	Few paths related errors
	in your way?	
	What did you do yesterday?	Improving on user stories
KOUSHIK	What will you do today?	Installation and configuration of tools
KOOSIIIK	Are there any impediments	Few paths related errors
	in your way?	
	What did you do yesterday?	Improving on user stories
ROHIT	What will you do today?	Installation and configuration of tools
KOHH	Are there any impediments	Few paths related errors
	in your way?	

### **STANDUP NOTES 3 on WEEK 3**

Name	Question	Answer
	What did you do yesterday?	Worked on register page
SHANTHAN	What will you do today?	Improving the UI
	Are there any impediments in your way?	None
	What did you do yesterday?	Worked on Home Page
ABHINAV	What will you do today?	Implementing features for flight search
	Are there any impediments in your way?	Connection issues
	What did you do yesterday?	Worked on search flights page
LIKHITHA	What will you do today?	Improving on UI
	Are there any impediments in your way?	Issues with reset button
	What did you do yesterday?	Worked on admin page
KOUSHIK	What will you do today?	Improving on UI
	Are there any impediments in your way?	None
ROHIT	What did you do yesterday?	Installation and configuring complete.
	What will you do today?	Working on backend and PHP connections.

### STANDUP NOTES 4 on WEEK 4

Name	Question	Answer
	What did you do yesterday?	completed register page
SHANTHAN	What will you do today?	Create login page
SIMILLIM	Are there any impediments in your way?	None
	What did you do yesterday?	Worked on Home Page
ABHINAV	What will you do today?	Work on flights data
ADIMAY	Are there any impediments in your way?	None
	What did you do yesterday?	Completed till Reset button
LIKHITHA	What will you do today?	Create a page for search history
Likiiiiii	Are there any impediments in your way?	None
	What did you do yesterday?	Adding data to admin page is accomplished
KOUSHIK	What will you do today?	Work on updating data on admin page
KOOSIIIK	Are there any impediments in your way?	None
	What did you do yesterday?	Done with backend connections.
ROHIT	What will you do today?	Given my SQL database connections
Komi	Are there any impediments in your way?	None

### **STANDUP NOTES 5 on WEEK 5**

	What did you do yesterday?	Register page and login page with validation completed
SHANTHAN	What will you do today?	Need to fix few glitches
	Are there any impediments in your way?	None
	What did you do yesterday?	Home page and flight data to discover and filter is done
ABHINAV	What will you do today?	Need to rectify few issues
	Are there any impediments in your way?	CSS issues
	What did you do yesterday?	Search history page completed
LIKHITHA	What will you do today?	Need to verify issues with booking page
LIKIIIIIA	Are there any impediments in your way?	None
	What did you do yesterday?	Add, update data on admin page is completed
KOUSHIK	What will you do today?	Delete is not working properly, need to work on it
	Are there any impediments in your way?	Data is not cleared from the backend
ROHIT	What did you do yesterday?	Done with My SQL connections.
КОПП	What will you do today?	Worked on Ancillary booking

# **Implementation**

### **Tools:**

- 1. PhpStorm Editor
- 2. XAMPP Web Server
- 3. Phpmyadmin MySQL Database Management

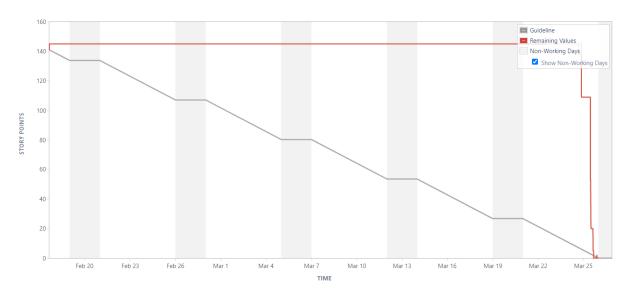
### Languages Used:

- 1. HTML/CSS/JS
- 2. PHP
- 3. SQL

Project Link: <a href="https://github.com/ravellaabhinav/SWE---Project">https://github.com/ravellaabhinav/SWE---Project</a>

# **Reports:**

### **Burndown Chart:**



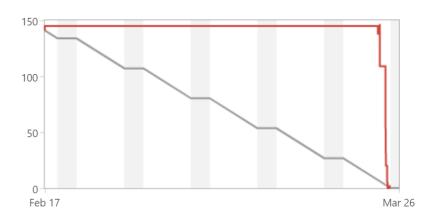
### **Sprint Report:**

### Sprint Report switch report •

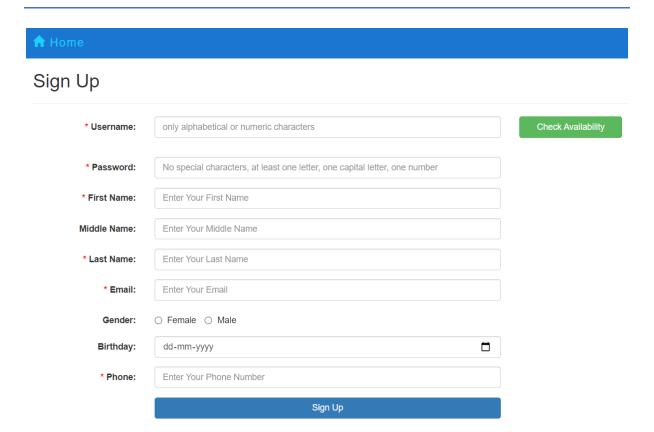
#### CSSBPIAA Sprint 1

Active Sprint, started by Ravella Abhinav 17/Feb/22 3:41 PM - 26/Mar/22 9:00 PM Linked pages

Our goal is to gather all flight details and create a user friendly page to view, book tickets



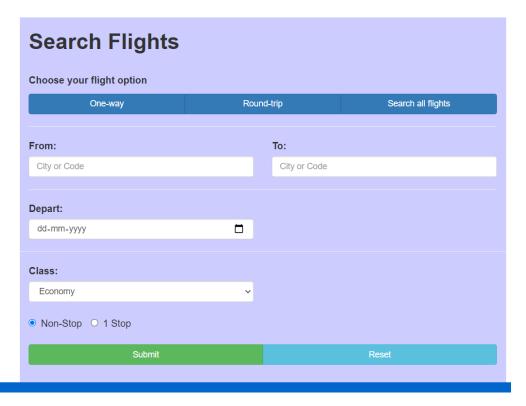
### **Screenshots:**

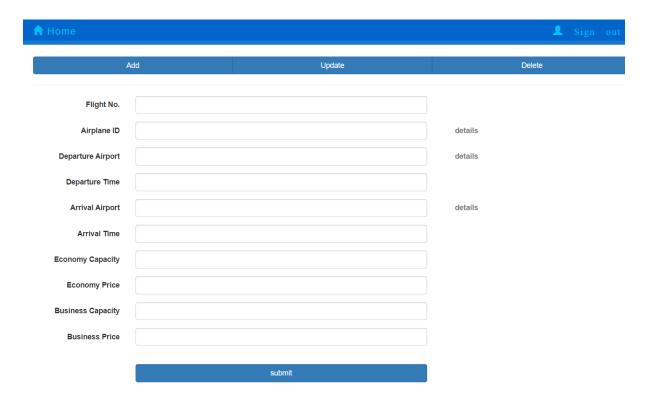












Github Link: https://github.com/ravellaabhinav/SWE---Project