



American International University-Bangladesh (AIUB)

Department of Computer Science

Faculty of Science & Technology (FST)

Software Engineering

PROJECT TITLE

USS Discovery – *Intergalactic Traveling*

Faculty

Tonny Shekha Kar

Submitted by

Group 2

Section: H

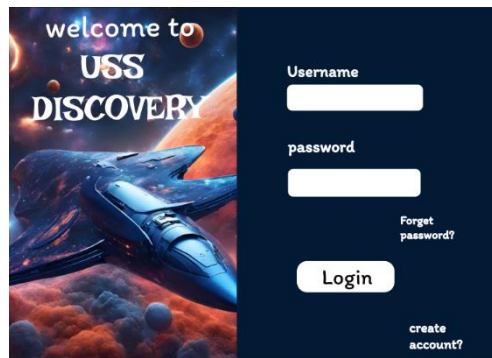
Fall 24-25

Group members

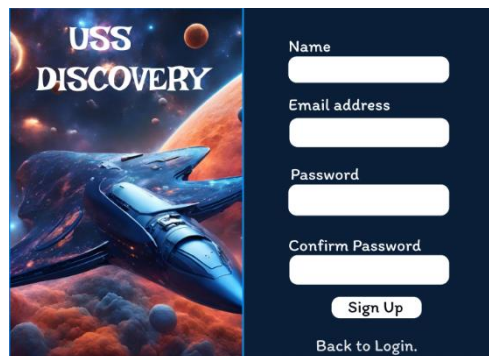
<i>SN</i>	<i>STUDENT NAME</i>	<i>STUDENT ID</i>
01	Md. Siam Mehedi	22-48342-3
02	Rokiya Ibne Tanha	22-48833-3
03	Md. Lutful Kabir	22-49135-3
04	Maharin Afroj Richi	22-49145-3
05	Bijoy Ahamed	22-49373-3
06	Fahim Mubarrat Ishmam	22-49111-3

UI DESIGN

SIAM



This image is a login page for a space-themed application or website called "USS Discovery." The left side features a spaceship flying in a colorful space setting, while the right side includes a login form with fields for a username, password, and options to recover or create an account. The design combines a science fiction aesthetic with user interactivity.



This image highlights the sign-up page for the "USS Discovery" application or website. On the left, it retains the same spaceship and cosmic background. On the right, it features a form with fields for entering a name, email address, password, and confirming the password. Below the form, there is a "Sign Up" button and an option to return to the login page.



This is the "USS Discovery" password recovery page, featuring a form to enter an email address and a "Send Code" button, set against a consistent space-themed design.



4. After clicking the "Send Code" button, the typical procedure would be as follows:

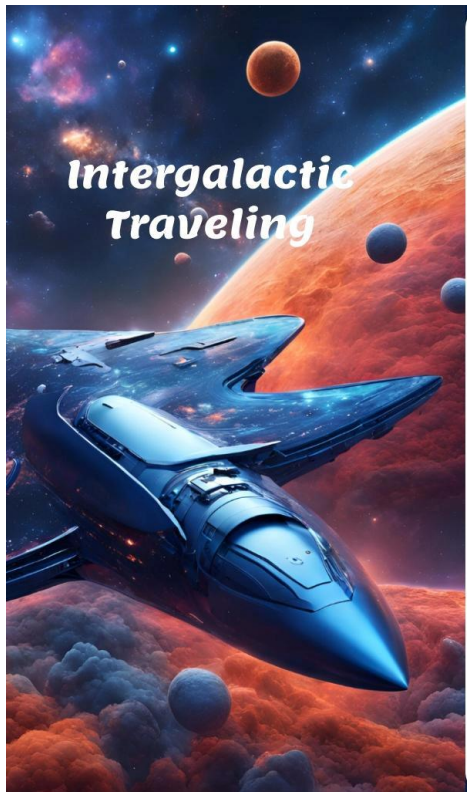
Email Sent: The system sends a unique verification code to the email address provided.

Check Email: The user checks their email inbox for the message containing the code.

Enter Code: The user inputs the received code into a designated field on the website or app.

Verify: The system verifies the code for correctness and, if valid, proceeds to allow the user to reset their password.

TANHA

A vertical rectangular image on the left side of the form. It features a blue and silver spaceship flying through a space filled with orange and red nebulae, planets, and stars. The text "Intergalactic Traveling" is written in a white, stylized font in the upper left corner of the image.

Create Password

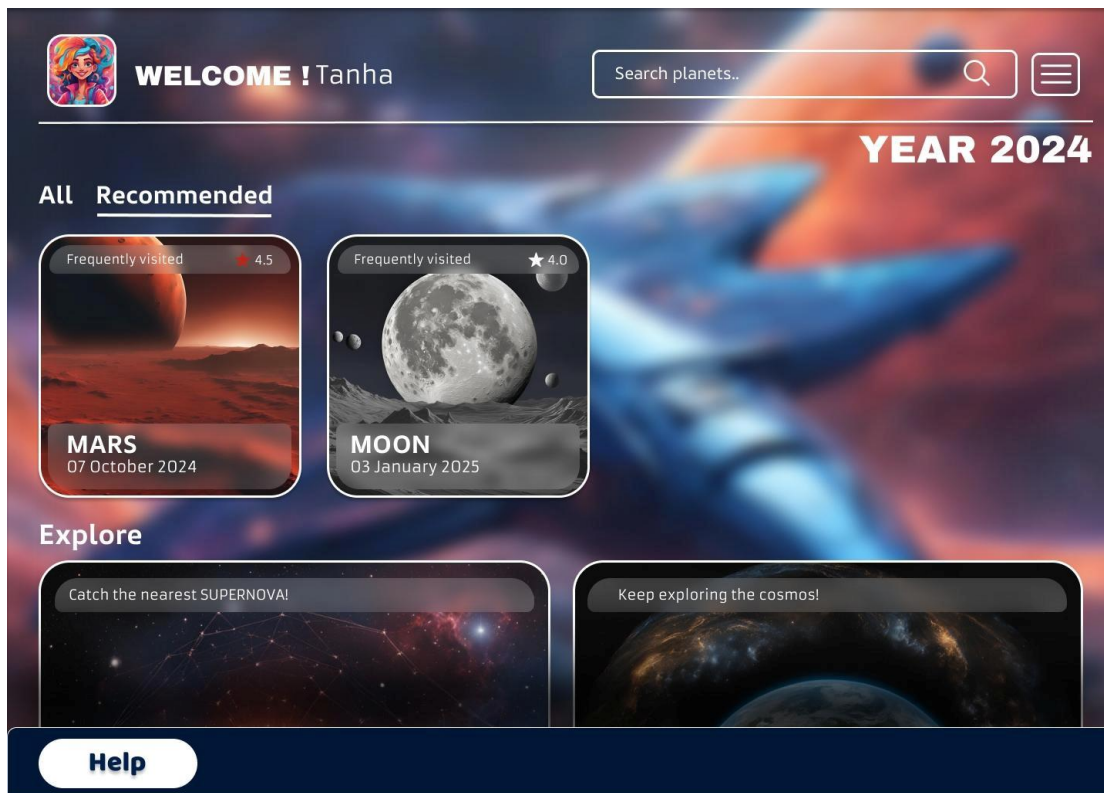
Enter new password

Confirm password

Confirm

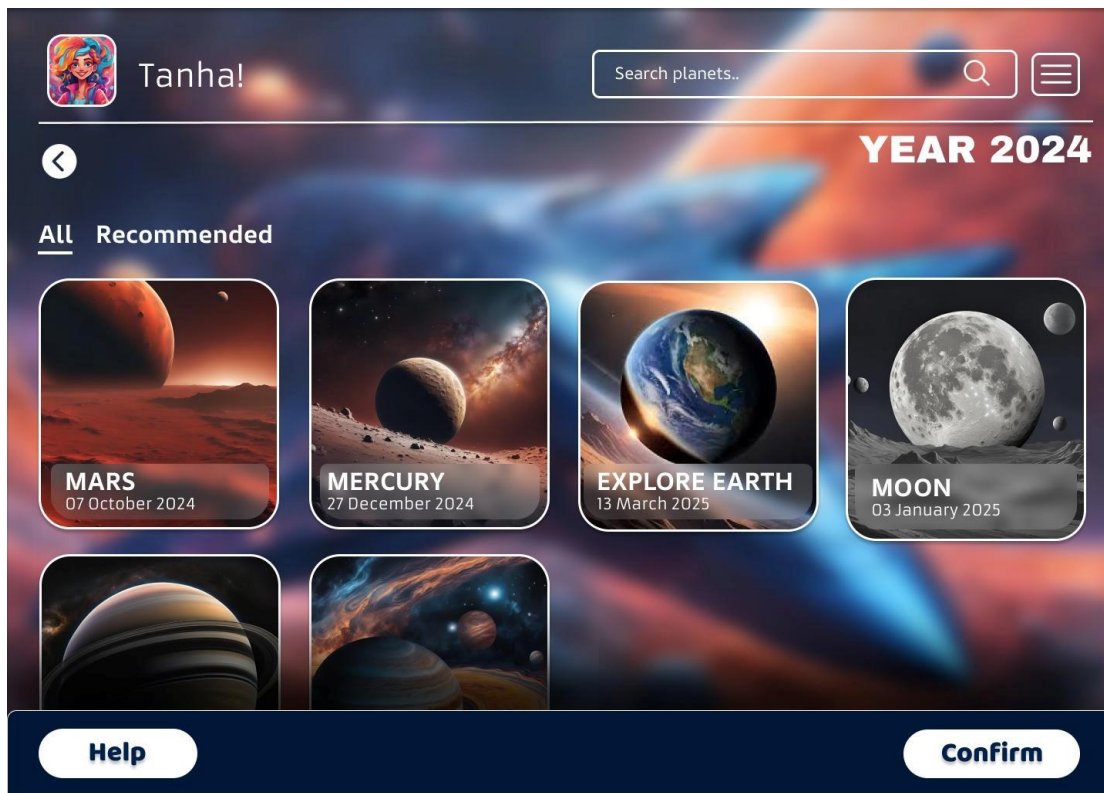
This creating password page focuses on securing user access by guiding them to create and confirm a strong password.

Users can set a password that meets specific security requirements, view password strength indicators, and confirm their entries to proceed to the next step. This step lays a solid foundation for a safe and personalized intergalactic travel experience while giving users control over their account security.



The recommended planets page warmly welcomes users to the platform with a visually appealing layout showcasing recommended planets.

Users can browse through the recommended planets, view key details like travel highlights or unique features, and click on a planet to learn more. This page helps users explore popular destinations, making it easier to their intergalactic journey with excitement and inspiration.



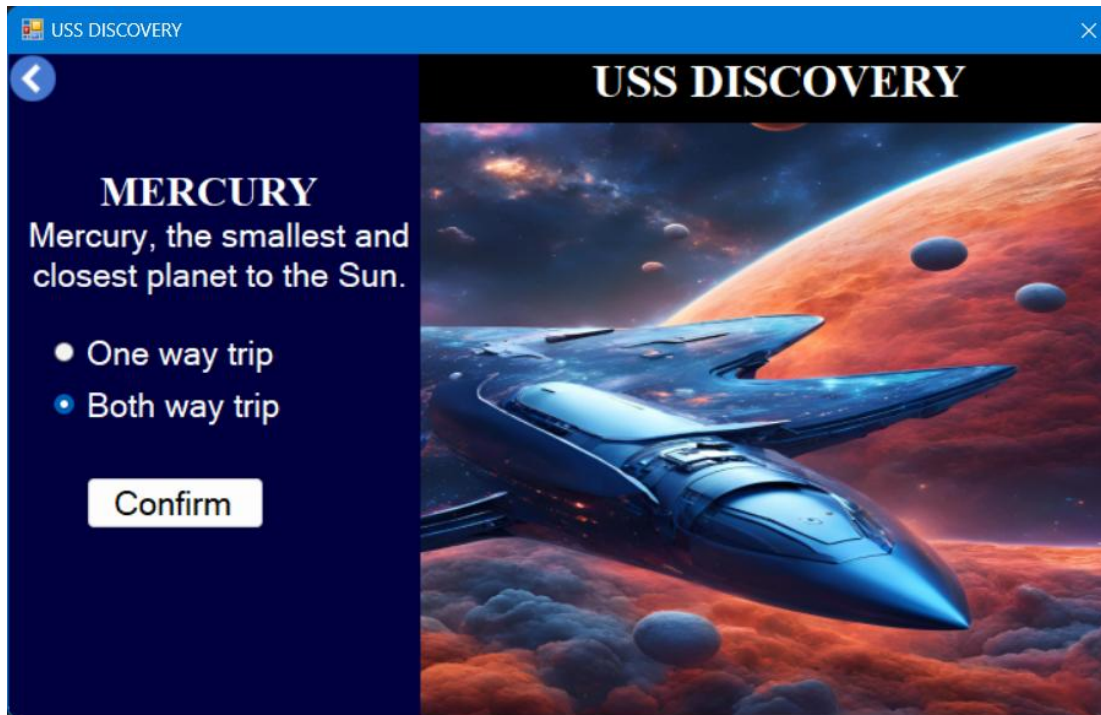
The exploration page serves as the main hub for exploring all available planets, offering users an interactive grid or list view.

Users can click on any planet to view more details, compare options, or proceed to selection. A prominent confirm button allows users to finalize their choice and move forward confidently. This page provides users with the freedom to explore and make informed decisions, ensuring a personalized and engaging experience.



The confirmation page focuses on confirming the selected planet, such as Mercury, by presenting detailed information about the destination. Users can review essential details, including trip highlights, temperature, pressure and any special features of the planet. A clearly visible confirmation button enables users to lock in their choice and proceed to the next steps.

BJOY



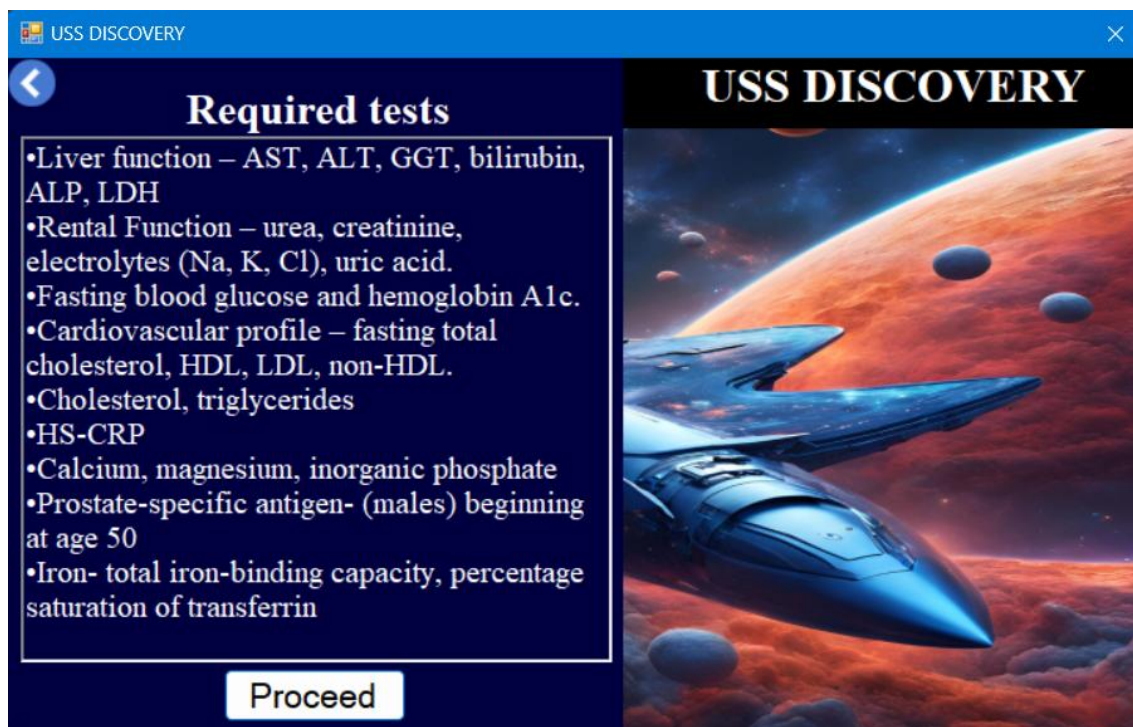
One or both way trip option functional requirement. User can choose between one way or both way trips option base on their travel preferences.



This page is for selecting the purpose of travelling .user can select the following purpose of their trips.

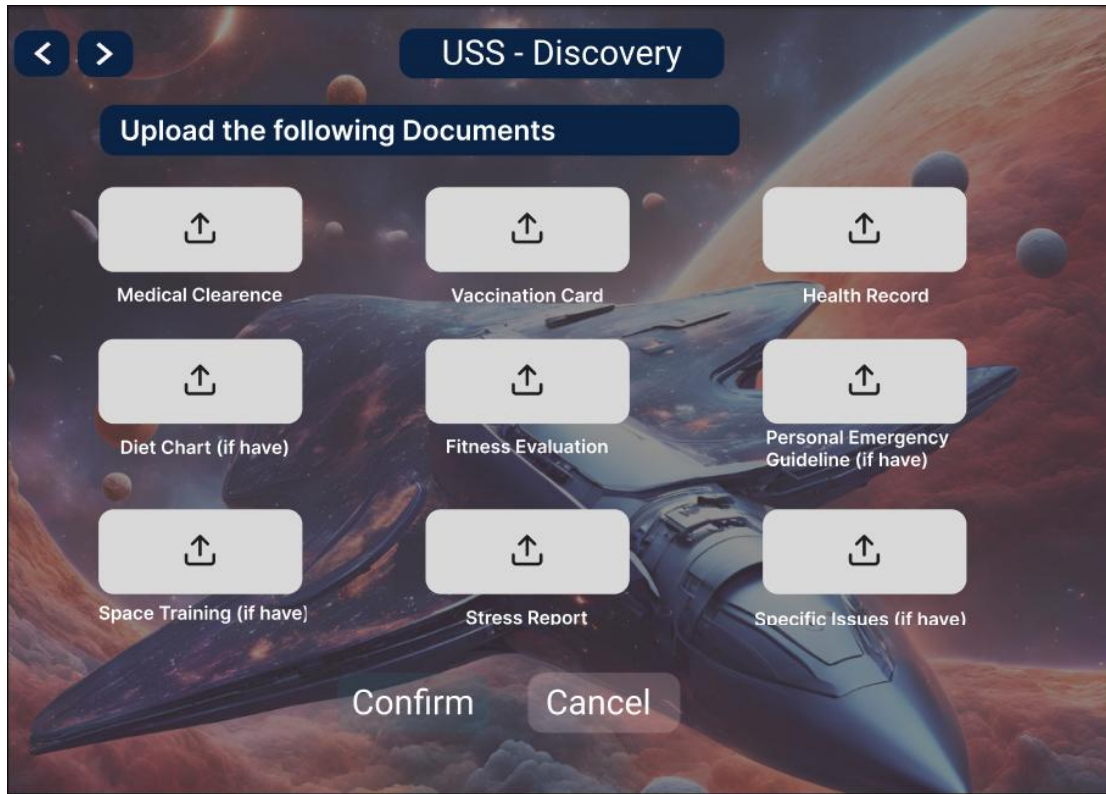


After selecting the previous requirement for trips system calculates the amount of money user need to pay for their trips and other expenses.



This page shows the test and documents list for the user which needs to upload in next page.

Lutful

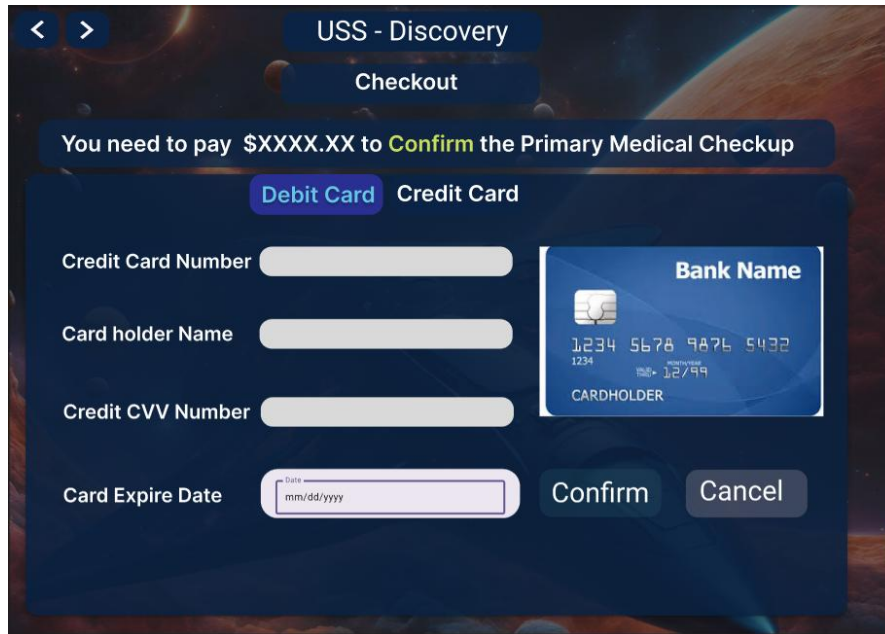


The image shows a UI design for a document upload screen titled "USS - Discovery". The background is a space-themed illustration of a spaceship flying through a cosmic scene with planets and stars. At the top, there are navigation arrows (left and right) and the title "USS - Discovery". Below the title is a dark blue button labeled "Upload the following Documents". The main area contains nine document upload fields arranged in a 3x3 grid. Each field consists of a light gray button with an upward arrow icon and a label below it. The labels are: "Medical Clearance", "Vaccination Card", "Health Record", "Diet Chart (if have)", "Fitness Evaluation", "Personal Emergency Guideline (if have)", "Space Training (if have)", "Stress Report", and "Specific Issues (if have)". At the bottom of the screen, there are two buttons: "Confirm" and "Cancel".

This is a UI design page for the *USS Discovery - Intergalactic Traveling* project. The screen focuses on document uploads, requiring users to provide specific health and fitness-related documents for space travel. The upload fields include:

- **Mandatory Documents:** Medical Clearance, Vaccination Card, Health Record, Fitness Evaluation.
- **Optional Documents:** Diet Chart, Space Training, Stress Report, Personal Emergency Guidelines, and Specific Issues.

At the bottom, there are two action buttons: Confirm to submit the uploads and Cancel to exit the process. The design is space-themed, with a background depicting a spaceship and a cosmic scene to match the intergalactic travel context.



The image shows a payment form titled "USS - Discovery" with a "Checkout" button. A message states: "You need to pay \$XXXX.XX to Confirm the Primary Medical Checkup". Below this, there are two tabs: "Debit Card" (selected) and "Credit Card". The form includes input fields for "Credit Card Number", "Card holder Name", "Credit CVV Number", and "Card Expire Date" (with a date picker showing "mm/dd/yyyy"). To the right of these fields is a visual representation of a credit card with a blue background, a chip, and the text "Bank Name", "1234 5678 9876 5432", "1234", "12/99", and "CARDHOLDER". At the bottom right, there are "Confirm" and "Cancel" buttons.

This page is for taking payment from the customer. Customers input their credentials, and the calculated amount of money will be deducted from their given account.

They can pay in Debit or Credit card.

User also can Confirm the payment and Cancel the payment. If Cancels user can not go to the next page.



The image shows a "Payment Confirmation" screen titled "USS - Discovery". It displays a message: "Hello XXXX, Thank you for your payment on 16 December, 2024 for Starting training session for your space trip." Below this is a "Receipt" button. To the right of the receipt details is a graphic of yellow stars on a dark blue background. The receipt details are as follows:

Name	: XXX XXX
Payment ID	: xxxxxxxxxxxx
Amount	: \$xxxx
Date	: 16 December, 2024
Invoice Number	: xxxxxxxxxxxx
Address	: Dubai
Contact	: +xxxxxxxxxxxx

At the bottom, there are "Download" and "Next" buttons.

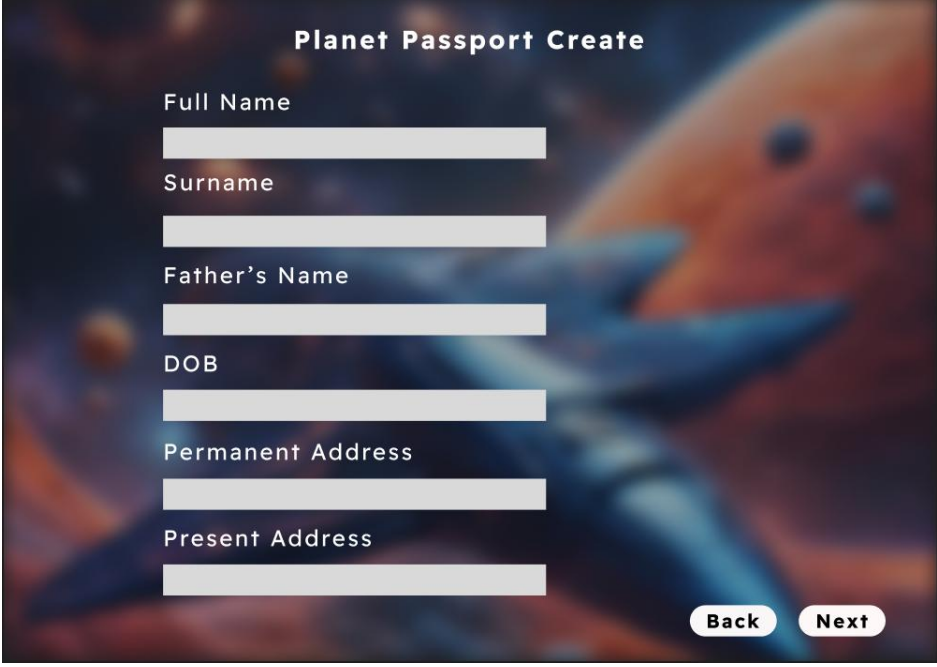
This UI page comes after clicking the confirmation button in payment page. It is showing all the details about the payment including the date of payment.

Customer can Download the receipt. But a confirmation text will be sent to their contact number.



This page is showing that the payment has been done after clicking the next button from the user in previous page. Also, the user is eligible for virtual passport application.

Richi



Planet Passport Create

Full Name

Surname

Father's Name

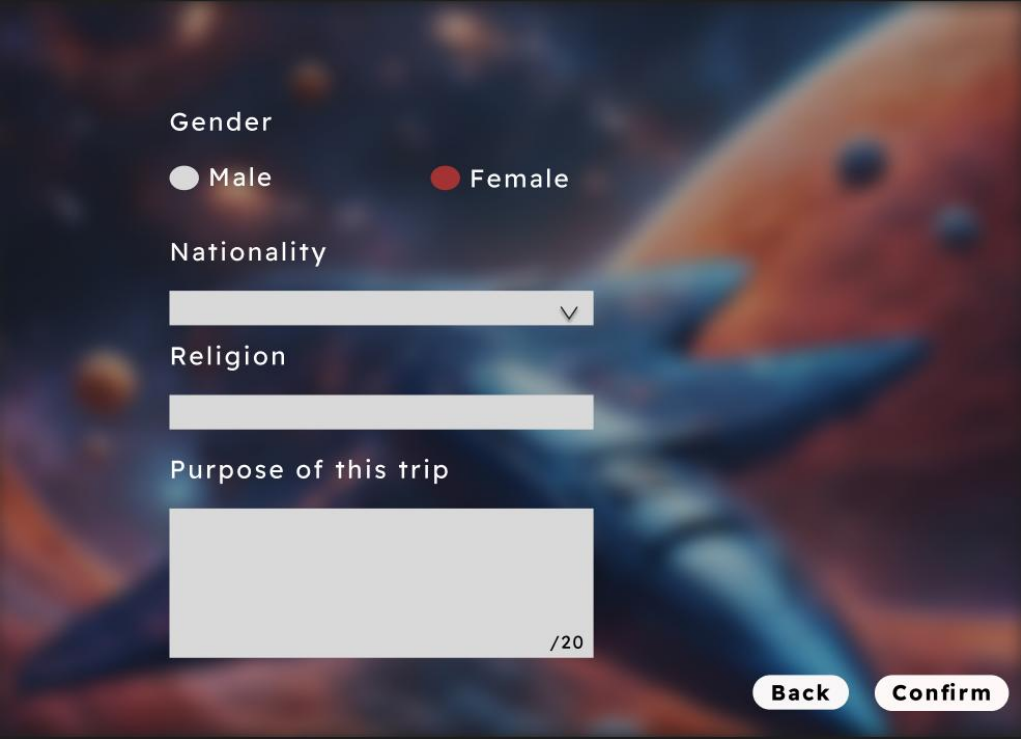
DOB

Permanent Address

Present Address

Back **Next**

Detailed information about the virtual passport application form. User must submit the form with valid information. The kind of information users need to provide can be seen in the UI design.



Gender
☐ Male ☐ Female

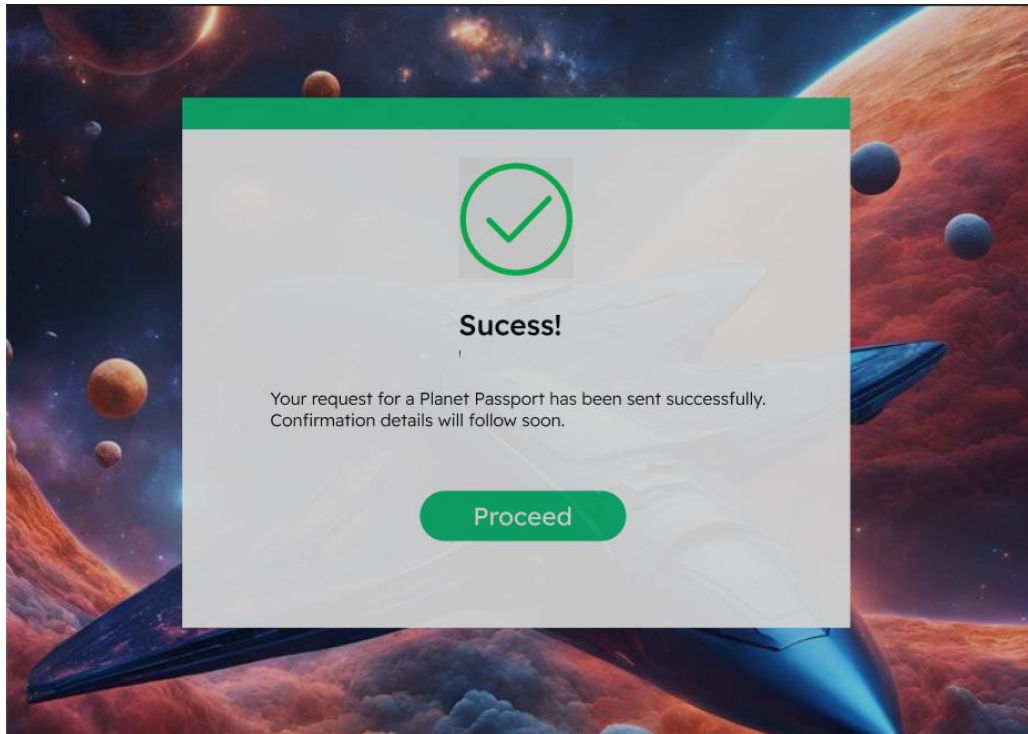
Nationality

Religion

Purpose of this trip

Back **Confirm**

This is the follow up for the previous page. Here also gives the information for the virtual passport registration. But here user clicks on confirmation button to submit the information.

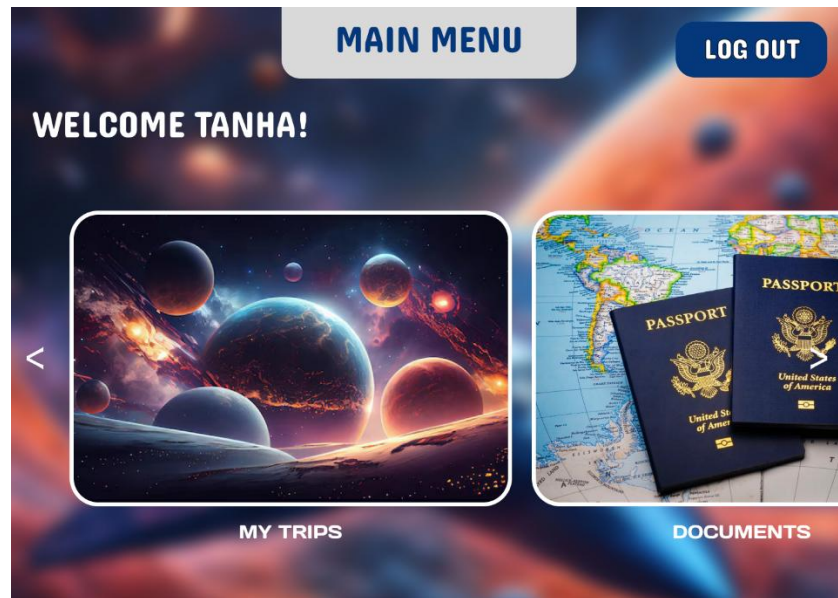


This is the message shows after completing the submission form for virtual passport.

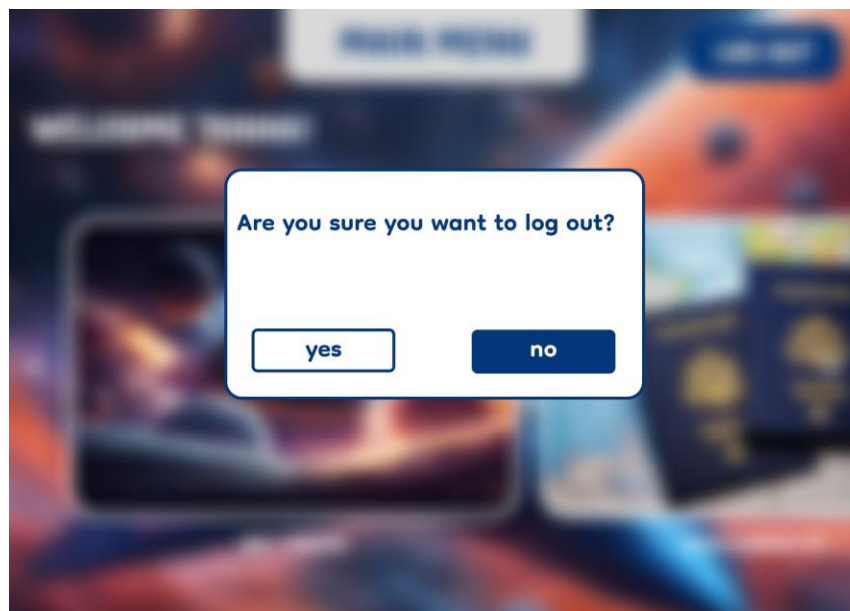


Now user can see the different kinds of training and percentage of completion of the training. It indicates how much training it took to travel other planets.

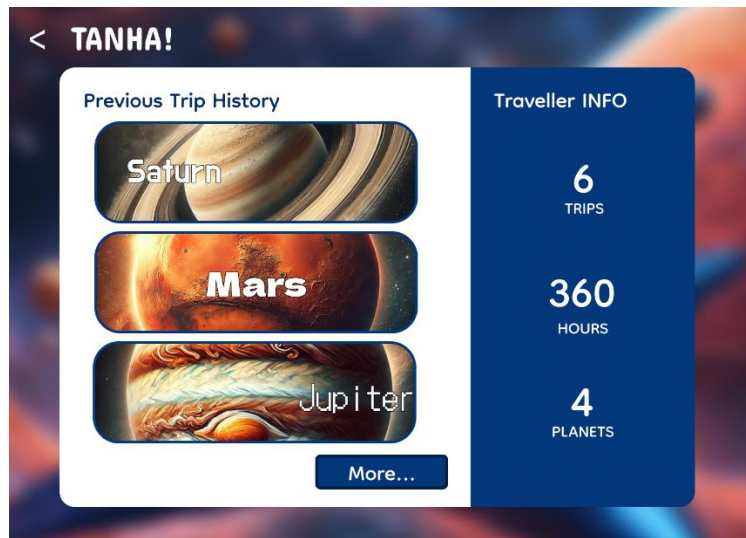
Ishmam



This is main menu, you can navigate through the program with this page. The arrow keys located on the left and right side of the screen as well as on the keyboard can be used to slide to the right and left side of the menu. The logout button is a the top right to sign off of the currently signed in account.



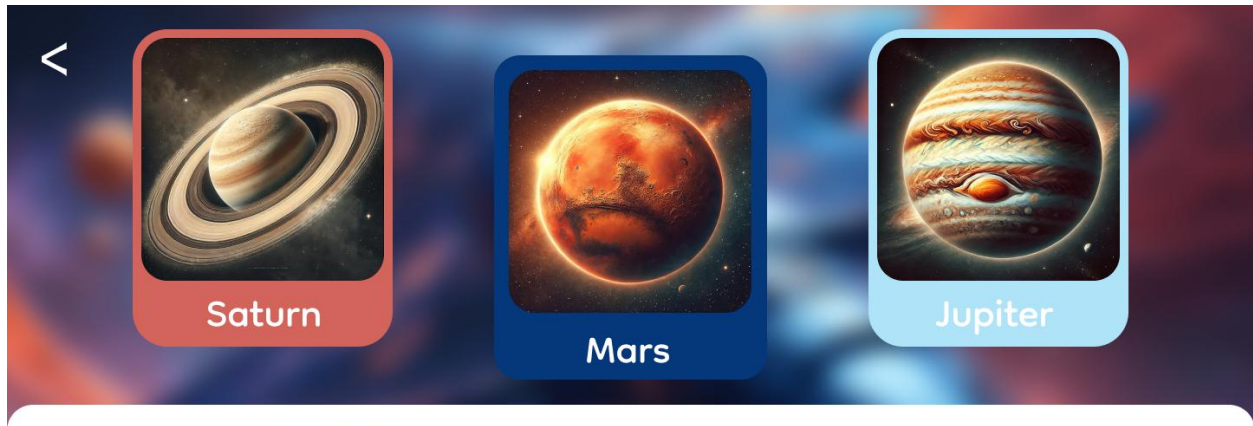
This is a pop up box that appears when the logout button is clicked.



The trip history page shows all the trips the user has already done. It also shows some basic information like the number of planets visited, the combined hour of all the trips and the total number of the trips. The arrow button on the top left can be used to go back to the main menu.



This page shows the passports information of the user. The arrow button on the top left can be used to go back to the main menu.



My Trips

< 2024 >

< December >

Mo	Tu	We	Th	Fr	Sa	Su
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

This page shows all the upcoming trips that are already booked and paid for. The calendar shows all the dates booked for all the upcoming trips. The arrow buttons on either side of the year and month are used to change them. The arrow button on the top left can be used to go back to the main menu.

TEST RESULTS

Project Name: USS Discovery-Intergalactic Traveling		Test Designed by Md. Siam Mehedi		
Test Case ID: USS-1.1		Test Designed date: 10-Dec-2024		
Test Priority (Low, Medium, High): High		Test Executed by: Md. Siam Mehedi		
Module Name: User Registration		Test Execution date: 27-Dec-2024		
Test Title: Verify User with Username and Password.				
Description: Test user username and password				
Precondition (If any): User is on the registration page				
Test Steps	Test Data	Expected Results	Actual Result	Status (Pass/Fail)
1.Go to the website. 2.Click on the signup button. 3.Enter valid username and password. 4.Enter the registered email and password. 5.Users are redirected to the user account's home page.	Name: Siam Username: Siam Password: Abc12345	User should valid Username and password	The username and password are saved as expected in the secure system.	Pass
Post Condition: User account is created and verified with the email address. The user's information is stored in the database.				

Project Name: USS Discovery-Intergalactic Traveling		Test Designed by: Md. Siam Mehedi		
Test Case ID: USS-1.2		Test Designed date: 27-Dec-2024		
Test Priority (Low, Medium, High): High		Test Executed by: Md. Siam Mehedi		
Module Name: Login Session		Test Execution date: 27-Dec-2024		
Test Title: Verify successful login with valid username and password				
Description: Test website login page				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Result	Status (Pass/Fail)
Go to the website Enter username Enter password Click submit	Username: Siam Password: Abc12345	User should login into the application	Validated with database and successfully login	Pass
Post Condition: User is validated with database and successfully login to account. The account session details are logged into the database.				

Project Name: USS Discovery-Intergalactic Traveling		Test Designed by: Md. Siam Mehedi		
Test Case ID: USS-1.3		Test Designed date: 10-Dec-2024		
Test Priority (Low, Medium, High): Medium		Test Executed by: Md. Siam Mehedi		
Module Name: User Registration		Test Execution date: 27-Dec-2024		
Test Title: Verify User Registration with valid input data				
Description: Test user registration process				
Precondition (If any): User is on the registration page				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to the website. 2.Click on the signup button. 3.Enter valid name, username, email, and password. 4.User account is created, 5.Enter the registered email and password.	Name: Siam Username: Siam Email: siam@gmail.com Password: Abc12345	User should valid Username, Phone no and password	Information is accurate and comprehensive	Pass
Post Condition: User account is created.				

Project Name: USS Discovery-Intergalactic Traveling		Test Designed by: Md. Siam Mehedi		
Test Case ID: USS-1.4		Test Designed date: 10-Dec-2024		
Test Priority (Low, Medium, High): High		Test Executed by: Md. Siam Mehedi		
Module Name: User Registration		Test Execution date: 27-Dec-2024		
Test Title: Verify User Email				
Description: Test user email				
Precondition (If any): User is on the registration page				
Test Steps	Test Data	Expected Results	Actual Result	Status (Pass/Fail)
1.Go to the a. 2.Click on the signup button 3.Enter valid name, username, email, and password 4.User account is created, and user is redirected to the login page as expected, Pass 5.Check email for verification link and click on its User is redirected to a page confirming their email address	Name: Siam Username: Siam Email: siam@gmail.com Password: Abc12345	User should validly Email address	Receives a verification email, verifies their account, and the system updates their database record to "verified."	Pass
Post Condition: User account is created and verified with the email address. The user's information is stored in the database.				

Project Name: USS Discovery-Intergalactic Traveling	Test Designed by: Md. Siam Mehedi
Test Case ID: USS-1.5	Test Designed date: 27-Dec-2024
Test Priority (Low, Medium, High): High	Test Executed by: Md. Siam Mehedi
Module Name: Login Session	Test Execution date: 27-Dec-2024
Test Title: Verify login with incorrect username and password	
Description: Test website login page with incorrect username and password:	
Precondition (If any): User must have incorrect username and password	

Test Steps	Test Data	Expected Results	Actual Result	Status (Pass/Fail)
1.Go to the website 2.Enter incorrect username Enter incorrect password 3.User should prompt with a verification code and an email should be sent to the user's email address as expected, Pass 4.Check email for verification code and enter the verification code received in the email Click submit User should login into the application	Username: abc123 Password: pass123 Verification code: 12345	User should login into the application	Delivery failure, invalid verification link/code, database update errors, or improper handling of user status.	Fail
Post Condition: User is logged in and the home page of the user account is displayed. The user session details are logged into the database.				

Project Name: <i>USS Discovery – Intergalactic Traveling</i>		Test Designed by: Rokiya Ibne Tanha		
Test Case ID: USS-2.1		Test Designed date: 26.12.2024		
Test Priority (Low, Medium, High): High		Test Executed by: Rokiya Ibne Tanha		
Module Name: Password Design		Test Execution date: 01.01.2025		
Test Title: Verify Password Creation				
Description: Test the ability of the system to successfully create an account with a valid password.				
Precondition (If any): User is on the registration page.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Open the app.	Password: Pass12345! Confirm Password: Pass12345!	The app opens successfully.	The app opened without issues.	Pass
2. Navigate to the registration page.		The user navigates to the registration page without issues.	Unable to access the registration page; an unexpected error occurred.	Fail
3. Enter a valid Password, and confirm password.		The system accepts valid input and proceeds to save the account details securely.	The system accepted the input and processed the registration.	Pass
4. Submit the registration form.		A confirmation message is displayed to indicate successful registration.	No confirmation message appears, and the process stalls unexpectedly.	Fail
Post Condition: The user account is not created due to multiple failures in the process. Immediate attention is required to address these issues.				

Project Name: <i>USS Discovery – Intergalactic Traveling</i>		Test Designed by: Rokiya Ibne Tanha		
Test Case ID: USS-2.2		Test Designed date: 26.12.2024		
Test Priority (Low, Medium, High): Medium		Test Executed by: Rokiya Ibne Tanha		
Module Name: Welcome Screen		Test Execution date: 01.01.2025		
Test Title: Verify Welcome Recommended Design				
Description: Test the welcome screen to ensure that the recommended items or destinations are correctly displayed to the user based on preferences.				
Precondition (If any): User is logged in and on the welcome screen.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Open the app.	User Preferences: Space travel	The app opens successfully.	The app opened without issues.	Pass
2. Ensure the user is logged in and the welcome screen is displayed.		The user is logged in successfully.	The user is logged in without issues.	Pass
3. Verify that recommended items (e.g., space destinations, activities) are shown based on user preferences.		The welcome screen displays recommended items (e.g., Moon, Mars) based on user preferences.	The welcome screen displays recommended items accurately based on preferences.	Pass
Post Condition: The user sees personalized recommendations on the welcome screen, meeting their preferences and expectations.				

Project Name: <i>USS Discovery – Intergalactic Traveling</i>		Test Designed by: Rokiya Ibne Tanha		
Test Case ID: USS-2.3		Test Designed date: 26.12.2024		
Test Priority (Low, Medium, High): High		Test Executed by: Rokiya Ibne Tanha		
Module Name: Space Travel Destinations		Test Execution date: 01.01.2025		
Test Title: Verify Destination Selection Process				
Description: Test the process of browsing and selecting space destinations				
Precondition (If any): User is logged in and navigates to the "Planets" section.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Open the app.	Destination Name: Mercury Distance: 77 million km Duration: 3 months	App opens successfully.	App opened without issues.	Pass
2. Navigate to destinations section.		Destination options are displayed.	Destination options displayed properly.	Pass
3. Browse and select desired destination		Destination details are displayed.	Details for Mercury shown.	Pass
4. Verify information such as distance, duration, and attractions.		Accurate and relevant information is displayed.	Information displayed is incorrect or incomplete.	Fail
Post Condition: The planet details for Mercury are displayed, and the user can view additional information such as distance, atmosphere, temperature, and trip.				

Project Name: <i>USS Discovery – Intergalactic Traveling</i>		Test Designed by: Rokiya Ibne Tanha		
Test Case ID: USS-2.4		Test Designed date: 26.12.2024		
Test Priority (Low, Medium, High): High		Test Executed by: Rokiya Ibne Tanha		
Module Name: Planet Design		Test Execution date: 01.01.2025		
Test Title: Verify Planet Selection				
Description: Test the process of browsing available planets and selecting Mercury, ensuring that all related details are displayed accurately.				
Precondition (If any): User is logged in and navigates to the "Planets" section.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Open the app.	Planet Name: Mercury	App opens successfully.	App opened without issues.	Pass
2. Navigate to the "Planets" section.		"Planets" section is displayed.	"Planets" section displayed properly.	Pass
3. Browse available planets.		Planet options are displayed correctly.	Planet options failed to load or displayed incorrectly.	Fail
4. Select the desired planet.		Planet details (e.g., distance, atmosphere, temperature, trip) are displayed correctly.	Planet details load as expected.	Pass

Post Condition: The planet details for Mercury should be displayed, including distance, atmosphere, temperature, and trip information

Project Name: USS Discovery Intergalactic Traveling		Test Designed by: Bijoy Ahamed		
Test Case ID: USS-3.1		Test Designed date: 23-12-2024		
Test Priority (Low, Medium, High): High		Test Executed by: Bijoy Ahamed		
Module Name: Forget Password		Test Execution date: 01-01-2025		
Test Title: Verify One-Way and Both-Way Trip Selection				
Description: Test the process of selecting between one-way and both-way trip options				
Precondition (If any): Destination is selected.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to trip options section. Navigate to destinations section. 2. Choose between one-way and both-way trips. 3. Verify pricing and availability for both options.		Selected option is highlighted.		
Post Condition: Pricing and availability are displayed correctly.				

Project Name: USS Discovery-Intergalactic Traveling		Test Designed by: Bijoy Ahamed		
Test Case ID: USS-3.2		Test Designed date: 23-12-2024		
Test Priority (Low, Medium, High): High		Test Executed by: Bijoy Ahamed		
Module Name: Forget Password		Test Execution date: 01-01-2025		
Test Title: Verify Purpose of travelling Selection				
Description: Test the process of selecting from the purpose of trip (Travelling, Research & Exploration)				
Precondition (If any): Destination is selected.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to trip options section. Navigate to destinations section. 2. Choose from the purpose of trip (Travelling, Research & Exploration). 3. Verify pricing and availability for each options.		Selected option is highlighted.		
Post Condition: Pricing and availability are displayed correctly.				

Project Name: USS Discovery-Intergalactic Traveling			Test Designed by: Bijoy Ahamed	
Test Case ID: USS-3.3			Test Designed date: 23-12-2024	
Test Priority (Low, Medium, High): High			Test Executed by: Bijoy Ahamed	
Module Name: Forget Password			Test Execution date: 01-01-2025	
Test Title: Verify Physical Tests Input				
Description: Test the process of inputting physical availability level of physical fitness.				
Precondition (If any): User is logged in				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to require d tests section.	Get physical test documents.	information is saved successfully.		
Post Condition: Recommendations are provided based on input.				

Project Name: USS Discovery-Intergalactic Traveling			Test Designed by: Bijoy Ahamed	
Test Case ID: USS-3.4			Test Designed date: 23-12-2024	
Test Priority (Low, Medium, High): High			Test Executed by: Bijoy Ahamed	
Module Name: Forget Password			Test Execution date: 01-01-2025	
Test Title: Verify Purpose-wise Cost Calculation				
Description: Test the functionality of providing cost breakdowns based on the purpose of the trip				
Precondition (If any): Destination and trip options are selected				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
Go to cost system section. 1. Select trip purpose (e.g., travelling, research, exploration).		Cost breakdown options are displayed.		
Post Condition: Relevant cost breakdown is shown.				

Project Name: <i>USS Discovery – Intergalactic Traveling</i>			Test Designed by: Md. Lutful Kabir	
Test Case ID: USS-4.1			Test Designed date: 26.12.2024	
Test Priority (Low, Medium, High): High			Test Executed by: Md. Lutful Kabir	
Module Name: Document Upload			Test Execution date: 01.01.2025	
Test Title: Document Upload Functionality				
Description: Testing the upload feature for all required and optional documents.				
Precondition (If any): <ul style="list-style-type: none">User must be logged into the system.Required documents should be ready for upload in acceptable formats (e.g., PDF, JPG).				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
Navigate to the document upload page	None	Document upload page loads correctly with all upload options visible.	Correctly loaded	pass
Upload Medical Clearance	Valid Medical Clearance PDF	File uploads successfully, and a confirmation icon/message appears.	Message showed	pass
Upload Vaccination Card	Valid Vaccination Card image (JPG)	File uploads successfully, and a confirmation icon/message appears.	Message showed	pass
Skip a mandatory field (e.g., Medical Clearance)	Leave field empty	System prevents proceeding and highlights missing required document(s).	Message didn't show	fail
Upload optional documents	Space Training, Stress Report	Files upload successfully, with confirmation message	Message showed	pass
Post Condition: Uploaded files are stored in the user's account and available for verification.				

Project Name: <i>USS Discovery – Intergalactic Traveling</i>			Test Designed by: Md. Lutful Kabir	
Test Case ID: USS-4.2			Test Designed date: 26.12.2024	
Test Priority (Low, Medium, High): High			Test Executed by: Md. Lutful Kabir	
Module Name: Payment Processing			Test Execution date: 01.01.2025	
Test Title: Payment System Validation				
Description: Validating the credit and debit card payment functionality.				
Precondition (If any):				
User should have filled out the necessary documents and reached the payment page.				
User should have valid payment credentials.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
Navigate to the payment pa	None	Payment page loads with debit and credit card options visible.	Page loaded	Pass
Enter valid debit card details	Card Number: 1234 5678 9876 5432, Expiry: 12/25, CVV: 123	Payment is processed successfully, and confirmation messages are displayed.	Payment done and message displayed.	Pass
Enter invalid card details	Invalid card number (e.g., 0000 0000 0000 0000)	System prevents payment and displays an error message indicating invalid credentials.	Error payment	Fail
Leave fields blank	No data entered	System prevents proceeding and highlights required fields.	No highlight	fail
Select credit card and proceed	Valid credit card details	Payment is successfully processed, and confirmation is displayed.	Payment done and message showed	pass
Post Condition: Payment is recorded in the system, and a receipt is generated.				

Project Name: <i>USS Discovery – Intergalactic Traveling</i>			Test Designed by: Md. Lutful Kabir	
Test Case ID: USS-4.3			Test Designed date: 26.12.2024	
Test Priority (Low, Medium, High): High			Test Executed by: Md. Lutful Kabir	
Module Name: Receipt Generation			Test Execution date: 01.01.2025	
Test Title: Receipt Generation and Download				
Description: Testing the receipt generation, data accuracy, and download functionality.				
Precondition (If any): User must have successfully completed a payment.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
Navigate to the receipt page	None	Receipt page loads with accurate payment details visible (e.g., amount, date).	Loaded	Pass
Verify payment details	Payment: \$1234, Date: 12/16/2024	All payment details match the data from the payment process.	Payment data matched	Pass
Download the receipt	Click download button	Receipt downloads successfully in PDF format.	PDF can't be downloaded	Fail
Click "Next" button	None	System navigates to the next section after displaying the receipt.	Navigates to the next	Pass
Post Condition: Receipt is available for future reference and stored in the user's account.				

Project Name: <i>USS Discovery – Intergalactic Traveling</i>			Test Designed by: Md. Lutful Kabir	
Test Case ID: USS-4.4			Test Designed date: 26.12.2024	
Test Priority (Low, Medium, High): High			Test Executed by: Md. Lutful Kabir	
Module Name: Virtual passport			Test Execution date: 01.01.2025	
Test Title: Initial confirmation for creating virtual passport.				
Description: Testing as the confirmation for the trip and apply for the virtual passport.				
Precondition (If any): Payment needs to be done and all document should be uploaded properly.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
Page navigation	None	Page loaded successfully and asks to apply for virtual passport.	Page loaded and asked to apply for virtual passport.	Pass
Passport application button clicked	None	The button should work and navigate next page	Worked properly.	pass
Post Condition: None				

Project Name: <i>USS DISCOVERY-Intergalactic Traveling</i>		Test Designed by: MAHARIN AFROJ RICH		
Test Case ID: USS-5.1		Test Designed date: 29/12/2024		
Test Priority (Low, Medium, High): High		Test Executed by: Maharin AFROJ RICH		
Module Name: Passport Creation		Test Execution date: 01/01/2025		
Test Title: Verify Passport Creation				
Description: Test the process of creating a virtual passport within the app				
Precondition (If any): User is logged in				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to the passport creation section.	N/A	Navigation to passport creation UI.	Navigation successful.	Pass
2. Enter personal information (e.g., Name, DOB, Address) and upload photos.	Full Name: Rukaiya Tanha, DOB: 12/28/1990, Address: 123 Sohid Road	Information successfully captured.	DOB field failed validation.	Fail
3.Choose Gender, Nationality, Religion, and fill in the trip purpose.	Gender: Female, Nationality: Martian, Trip Purpose: Adventure	Details successfully saved.	Details successfully saved.	Pass
4.View passport details, including destinations and trip history.	N/A	Passport details displayed accurately.	Details displayed with slight UI alignment issue.	Fail
Post Condition: Details are displayed accurately.				

Project Name: <i>USS DISCOVERY-Intergalactic Traveling</i>		Test Designed by: MAHARIN AFROJ RICHI		
Test Case ID: USS-5.2		Test Designed date: 30/12/2024		
Test Priority (Low, Medium, High): High		Test Executed by: MAHARIN AFROJ RICHI		
Module Name: Physical Training Input		Test Execution date: 01/01/2024		
Test Title: Verify Physical Training Input				
Description: Test the process of inputting physical training level or fitness goals				
Precondition (If any): User is logged in				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to physical training section.	N/A	Navigation to the physical training section.	Navigation successful.	Pass
2.Enter physical training level or fitness goals.	Fitness Level: Beginner, Goal: Weight Loss	Information is saved successfully	Information is saved successfully	Pass
3.Receive recommendations or training programs.	Get physical training documents	Recommendations match user input.	Recommendations mismatch user input.	Fail
Post Condition: Recommendations are provided based on input.				

Project Name: <i>USS Discovery – Intergalactic Traveling</i>			Test Designed by: Fahim Ishmam	
Test Case ID: USS-6.1			Test Designed date: 26.12.2024	
Test Priority (Low, Medium, High): Medium			Test Executed by: Fahim Ishmam	
Module Name: Main Menu			Test Execution date: 01.01.2025	
Test Title: Verify Main Menu and Welcome Screen Functionality				
Description: Test the appearance and navigation functionality of the main menu and welcome screen, ensuring options like “My Trips” and “Documents” are displayed correctly and functional.				
Precondition (If any): User is logged in and navigates to the welcome screen.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. User is logged in and navigates to the welcome screen. 2. Verify that the welcome screen greets the user with their name (e.g., “Welcome Tanha!”). 3. Verify that “My Trips” and “Documents” sections are displayed with appropriate images. 4. Click on “My Trips” and verify redirection to the trips section. 5. Return to the welcome screen and click on “Documents” to verify redirection to the documents section.	Logged-in User: Tanha	User can successfully navigate through the main menu	1. The welcome screen displays the user’s name and all navigation options clearly. 2. Clicking “My Trips” redirects the user to their trip management page. 3. Clicking “Documents” redirects the user to the documents page.	Pass
Post Condition: The user successfully interacts with the main menu and accesses the respective sections.				

Project Name: <i>USS Discovery – Intergalactic Traveling</i>		Test Designed by: Fahim Ishmam		
Test Case ID: USS-6.2		Test Designed date: 26.12.2024		
Test Priority (Low, Medium, High): High		Test Executed by: Fahim Ishmam		
Module Name: Logout box		Test Execution date: 01.01.2025		
Test Title: Verify Logout Confirmation Dialog Functionality				
Description: Test the appearance and functionality of the logout confirmation dialog that appears when a user attempts to log out, ensuring it prompts the user with “Are you sure you want to log out?” and provides “Yes” and “No” options, with the main menu background blurred.				
Precondition (If any): User is logged in and viewing the main menu.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Click the “Logout” button on the main menu. 2. Click the “No” option. 3. Verify that the dialog closes, and the user remains on the main menu with no changes to their session. 4. Click the “Logout” button again. 5. Click the “Yes” option. 6. Verify that the user is logged out.	Username: rukaiya Email: rukaiya@gmail.com Password: Pass12345!	1. Clicking “Logout” displays a confirmation dialog with the specified message and options, and the main menu background is blurred. 2. Selecting “No” closes the dialog without logging the user out, maintaining the current session. 3. Selecting “Yes” logs the user out and redirects them to the login page.	1.The pop up box works as it should. 2.Post-logout, the user cannot access the main menu or other authenticated areas without logging in again.	Pass
Post Condition: The user is either logged out and on the login page or remains logged in on the main menu, depending on their choice in the confirmation dialog.				

Project Name: <i>USS Discovery – Intergalactic Traveling</i>		Test Designed by: Fahim Ishmam		
Test Case ID: USS-6.3		Test Designed date: 26.12.2024		
Test Priority (Low, Medium, High): High		Test Executed by: Fahim Ishmam		
Module Name: Previous Trip History		Test Execution date: 01.01.2025		
Test Title: Verify Previous Trip History				
Description: Ensure that the “Previous Trip History” section displays accurate information about past trips with relevant details (e.g., destination names and traveler stats).				
Precondition (If any): User is logged in and navigates to the “Previous Trip History” section.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
7. Open the app. 2. Log in using valid credentials. 3. Navigate to the “Previous Trip History” section. 4. Verify that the section display trip destinations (e.g., Saturn, Mars, Jupiter) and traveler info.	Previous Trips: Saturn, Mars, Jupiter Traveler Info: 6 trips, 360 hours, 4 planets visited.	1. The “Previous Trip History” section lists all previous trips with correct details. 2. Traveler stats (e.g., number of trips, hours, planets) are accurate and updated.	All the available information about the previous trips are displayed accurately.	Pass
Post Condition: The user can review their trip history and traveler stats accurately.				

Project Name: <i>USS Discovery – Intergalactic Traveling</i>		Test Designed by: Fahim Ishmam		
Test Case ID: USS-6.4		Test Designed date: 26.12.2024		
Test Priority (Low, Medium, High): High		Test Executed by: Fahim Ishmam		
Module Name: Planet and Trip Selection		Test Execution date: 01.01.2025		
Test Title: Verify Planet and Trip Selection Screen				
Description: Test the functionality of browsing planets and selecting travel dates in the trip scheduling screen.				
Precondition (If any): The user is logged in and navigates to the “My Trips” section.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Open the app. 2. Navigate to the “My Trips” section. 3. Browse available planets. 4. Select the desired planet. 5. Choose a year and month from the calendar to schedule a trip.	Planet Name: Mars Year: 2024 Month: December	1. Available planets are displayed with appropriate visuals. 2. The user can select a planet, and it is highlighted upon selection. 3. The calendar allows navigation between years and months. 4. Selected travel dates are visually indicated on the calendar.	Planet details load as expected and the calendar interacts as you select the dates and the trips is highlighted in a specific color.	Pass
Post Condition: The user successfully selects a planet and schedules a trip with the chosen dates.				

Project Name: <i>USS Discovery – Intergalactic Traveling</i>		Test Designed by: Fahim Ishmam		
Test Case ID: USS-6.5		Test Designed date: 26.12.2024		
Test Priority (Low, Medium, High): High		Test Executed by: Fahim Ishmam		
Module Name: Intergalactic Passport		Test Execution date: 01.01.2025		
Test Title: Verify Passport Information Display				
Description: Test the display of user passport details, ensuring all information is accurate and correctly formatted.				
Precondition (If any): The user is logged in and navigates to the “Passport” section.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Open the app. 2. Navigate to the “Passport” section. 3. Review the displayed information (e.g., name, DOB, gender, nationality, address, passport number, issue/expiry dates, and passport class).	Name: Rokiya Ibne Tanha DOB: 07-12-2002 Passport No: 395711149909 Passport Issue Date: 02-03-2024 Passport Expiry Date: 02-03-2030 Passport Class: Tourist	1. All passport details are displayed accurately and formatted correctly. 2. The information matches the user’s registered details. 3. The passport section adheres to a professional and consistent design.	All the passport details are displayed on the page.	Pass
Post Condition: The user views accurate and well-presented passport details in the “Passport” section.				

TIMELINE CHARTS

```

graph TD
    Root[USS Discovery – Intergalactic Traveling]
    
    Root --- L1_PM[Project Management]
    Root --- L1_SE[System Engineering]
    Root --- L1_SW[Software]
    Root --- L1_HW[Hardware]
    Root --- L1_DM[Deliverables Management]
    Root --- L1_ST[System Test]
    Root --- L1_SS[Support Services]
    Root --- L1_Inst[Installation]
    
    L1_PM --- L2_PM1[Project Definition and scope]
    L1_PM --- L2_PM2[Project planning and schedule]
    L1_PM --- L2_PM3[Risk Management]
    L1_PM --- L2_PM4[Cost Management]
    L1_PM --- L2_PM5[Quality Management]
    L1_PM --- L2_PM6[Communication Management]
    L1_PM --- L2_PM7[Human Resource Management]
    
    L1_SE --- L2_SE1[System Requirements Definition]
    L1_SE --- L2_SE2[Technical Architecture Definition]
    L1_SE --- L2_SE3[Business Requirements Definition]
    L1_SE --- L2_SE4[System Design and Integration]
    L1_SE --- L2_SE5[Interface Design]
    
    L1_SW --- L2_SW1[Software Design]
    L1_SW --- L2_SW2[Software Build]
    L1_SW --- L2_SW3[Unit Testing]
    
    L1_HW --- L2_HW1[High Level Design]
    L1_HW --- L2_HW2[Environment Setup]
    L1_HW --- L2_HW3[Test Case Preparation]
    
    L1_DM --- L2_DM1[Deliverables Identification]
    L1_DM --- L2_DM2[Deliverables Tracking]
    L1_DM --- L2_DM3[Deliverables Acceptance]
    
    L1_ST --- L2_ST1[Test Planning]
    L1_ST --- L2_ST2[Test Case Development]
    L1_ST --- L2_ST3[System Testing]
    L1_ST --- L2_ST4[User Acceptance Testing]
    L1_ST --- L2_ST5[Regression Testing]
    
    L1_SS --- L2_SS1[User Training]
    L1_SS --- L2_SS2[Help Desk Setup]
    L1_SS --- L2_SS3[Ongoing Maintenance]
    L1_SS --- L2_SS4[Technical Support]
    
    L1_Inst --- L2_Inst1[Site Preparation]
    L1_Inst --- L2_Inst2[Software Installation]
    L1_Inst --- L2_Inst3[Configuration Management]
    L1_Inst --- L2_Inst4[Post-Installation Testing]
    
    L2_SW1 --- L3_SW1_1[Detailed Design]
    L2_SW1 --- L3_SW1_2[Interface Design]
    
    L2_SW2 --- L3_SW2_1[Compilation]
    L2_SW2 --- L3_SW2_2[Packaging]
    
    L2_SW3 --- L3_SW3_1[Test Execution]
    L2_SW3 --- L3_SW3_2[Defect Reporting and Resolution]
    
    L2_DM1 --- L3_DM1_1[Deliverables Identification]
    L2_DM2 --- L3_DM2_1[Deliverables Tracking]
    L2_DM3 --- L3_DM3_1[Deliverables Acceptance]
    
    L2_ST1 --- L3_ST1_1[Test Planning]
    L2_ST2 --- L3_ST2_1[Test Case Development]
    L2_ST3 --- L3_ST3_1[System Testing]
    L2_ST4 --- L3_ST4_1[User Acceptance Testing]
    L2_ST5 --- L3_ST5_1[Regression Testing]
    
    L2_SS1 --- L3_SS1_1[User Training]
    L2_SS2 --- L3_SS2_1[Help Desk Setup]
    L2_SS3 --- L3_SS3_1[Ongoing Maintenance]
    L2_SS4 --- L3_SS4_1[Technical Support]
    
    L2_Inst1 --- L3_Inst1_1[Site Preparation]
    L2_Inst2 --- L3_Inst2_1[Software Installation]
    L2_Inst3 --- L3_Inst3_1[Configuration Management]
    L2_Inst4 --- L3_Inst4_1[Post-Installation Testing]
  
```

[illegible]

Phase 1: Planning

- A: Project Requirements
- B: Defining Scope & Objectives
- C: Technology Selection & Feasibility Study

Phase 2: Design

- D: Platform Architecture Design
- E: UI/UX Design
- F: Database Design

Phase 3: Development

- G: Front-End Development
- H: Back-End Development
- I: Symptom Checker (AI Component)
- J: Secure Video Conferencing Feature

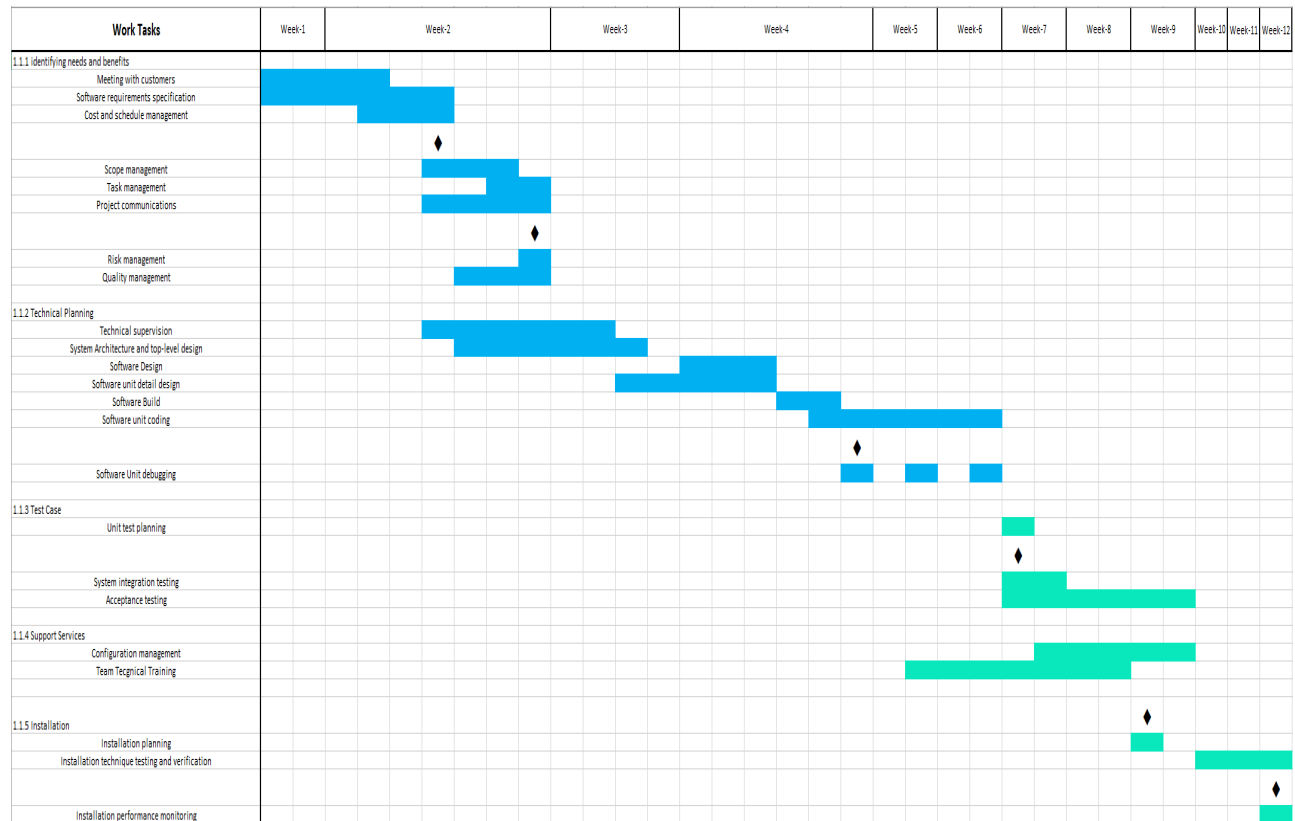
Phase 4: Testing & Integration

- K: Module Integration
- L: System Testing
- M: Bug Fixes

Phase 5: Deployment

- N: Initial Deployment
- O: User Training & Documentation
- P: Final Presentation & Submission

2.2: TIMELINE CHARTS (2):



EFFORT ESTIMATION ,
RISK TABLE,
RISK ANALYSIS

1. Effort Estimation:

COCOMO (Constructive Cost Model):

The **organic mode** in the COCOMO model is chosen for projects that are simple, well-understood, and familiar to the development team. It is ideal for smaller or medium-sized projects with stable requirements and minimal complexity.

In this case, the **SLOC (27,838)** fits within the organic range (2,000–50,000). The team likely has prior experience in the domain, making the problem less challenging to solve.

The **Project complexity (P = 1.05)** reflects low complexity, which aligns with organic mode characteristics. This mode assumes limited need for innovation, fewer interactions between subsystems, and straightforward development processes.

If the project involved higher complexity or constraints, other modes like semi-detached or embedded might be more suitable.

$$\text{SLOC} = 27838$$

$$P = 1.05 \text{ (Organic)}$$

$$\text{Coefficient } \langle \text{Effort Factor} \rangle = 2.4$$

$$T = 0.4$$

$$\begin{aligned} \text{Effort} = PM &= \text{Coefficient} * (\text{SLOC}/1000)^P \\ &= 2.4 * (27838/1000)^{1.05} \\ &= 78.90 \text{ months} \end{aligned}$$

$$\begin{aligned} \text{Development time} = DM &= 2.50 * (PM)^T \\ &= 2.50 * (78.90)^{0.4} \\ &= 14.34 \text{ months} \end{aligned}$$

$$\begin{aligned} \text{Required number of people} = ST &= PM/DM \\ &= 78.90 / 14.34 \\ &= 5.5 \sim 6 \end{aligned}$$

EVA (Earned Value Analysis):

Task	Planned Effort	Actual Effort
1	9	9.5
2	10	11
3	9	9.5
4	6	7
5	10	10.5

6	14	13
7	13.5	12
8	27	28
9	17	17.5
10	8	-
11	11	-
12	14	-

When we were asked to do the earned value analysis, 9 tasks were completed. However, the project scheduled indicates that 12 tasks should have been completed.

Effort Estimation = 595 Person Day

BAC = 595.00

BCWP = 115.50

BCWS = 148.50

ACWP = 118.00

$SPI = BCWP/BCWS = 115.50/148.50 = 0.778$

$SV = BCWP - BCWS = 115.50 - 148.50 = -33 \text{ person-day}$

$CPI = BCWP/ACWP = 115.50/118.00 = 0.9788$

$CV = BCWP - ACWP = 115.5 - 118.00 = -2.5$

$\% \text{ schedule for completion} = BCWS/BAC = 148.50/595.00 = 24.95\%$

[% of work schedule to be done at this time]

$\% \text{ complete} = BCWP/BAC = 115.50/595.00 = 19.41\%$

[% of work completed at this time]

2. Risk Table:

Risk	Category	Probability	Impact	Mitigation Strategy
Underestimating project size	Scope & Planning (SP)	High (70%)	Significant (4)	Conduct comprehensive size estimates and involve domain experts to improve accuracy.
Unexpected user growth	Scalability (SC)	Moderate (50%)	Moderate (3)	Implement dynamic scaling strategies and pre-allocate server capacity for peak loads.
Low resource reuse	Resource Management (RM)	High (80%)	Moderate (3)	Prioritize reusable components during design and promote modularity in development.
Resistance from end users	User Adoption (UA)	Low (30%)	Significant (4)	Engage users early through training programs and incorporate their feedback into the system design.
Tight deadlines	Timeline (TL)	Moderate (50%)	Low (2)	Optimize workflows and prioritize critical features to meet deadlines without sacrificing quality.
Loss of funding	Stakeholder Support (SS)	Low (20%)	Critical (5)	Schedule regular updates with stakeholders and provide data-driven progress reports to secure support.
Frequent requirement changes	Requirement Management (RM)	High (85%)	Significant (4)	Adopt agile methodologies and maintain open lines of communication with stakeholders.
Technology underperformance	Technical Feasibility (TF)	Low (30%)	Moderate (3)	Evaluate technology options rigorously during the planning phase and conduct prototyping.
Inadequate tool training	Team Enablement (TE)	High (90%)	Significant (4)	Conduct mandatory training sessions and provide ongoing support for team members.
Inexperienced staff	Workforce Capability (WC)	Moderate (50%)	Moderate (3)	Pair inexperienced staff with mentors and provide access to professional development resources.

High staff turnover	Workforce Retention (WR)	High (80%)	Significant (4)	Establish knowledge retention systems, such as documentation and video tutorials, to mitigate turnover impact.
Unclear requirements	Requirement Clarity (RC)	High (90%)	Significant (4)	Conduct detailed requirement-gathering workshops and maintain updated documentation throughout the project.
Security vulnerabilities	Cybersecurity (CS)	Low (20%)	Critical (5)	Perform regular security audits, penetration testing, and adopt strict access control measures.
Delays in development/testing	Project Delivery (PD)	Moderate (60%)	Significant (4)	Implement buffer times in the project schedule and closely monitor progress at each development stage.

Categories:

1. Scope & Planning (SP)
2. Scalability (SC)
3. Resource Management (RM)
4. User Adoption (UA)
5. Timeline (TL)
6. Stakeholder Support (SS)
7. Requirement Management (RM) (Removed duplicate)
8. Technical Feasibility (TF)
9. Team Enablement (TE)
10. Workforce Capability (WC)
11. Workforce Retention (WR)
12. Requirement Clarity (RC)
13. Cybersecurity (CS)
14. Project Delivery (PD)

Types of Impact:

1. Significant (4)
2. Moderate (3)
3. Low (2)
4. Critical (5)

3.Risk Analysis:

High Probability Risks ($\geq 70\%$)

1. **Underestimating Project Size (SP):** Significant (4)
 - Mitigation: Comprehensive size estimates with expert input.
2. **Low Resource Reuse (RM):** Moderate (3)
 - Mitigation: Focus on modular design.
3. **Frequent Requirement Changes (RM):** Significant (4)
 - Mitigation: Use agile methodologies.
4. **Inadequate Tool Training (TE):** Significant (4)
 - Mitigation: Mandatory training and ongoing support.
5. **High Staff Turnover (WR):** Significant (4)
 - Mitigation: Knowledge retention systems.
6. **Unclear Requirements (RC):** Significant (4)
 - Mitigation: Detailed requirement workshops and updated documentation.

Moderate Probability Risks (30-70%)

1. **Unexpected User Growth (SC):** Moderate (3)
 - Mitigation: Dynamic scaling strategies.
2. **Tight Deadlines (TL):** Low (2)
 - Mitigation: Optimize workflows and prioritize critical features.
3. **Inexperienced Staff (WC):** Moderate (3)
 - Mitigation: Mentorship and professional development.
4. **Delays in Development/Testing (PD):** Significant (4)
 - Mitigation: Schedule buffers and track progress.

Low Probability Risks ($\leq 30\%$)

1. **Resistance from End Users (UA):** Significant (4)
 - Mitigation: User training and feedback incorporation.
2. **Loss of Funding (SS):** Critical (5)
 - Mitigation: Regular updates and progress reports to stakeholders.
3. **Technology Underperformance (TF):** Moderate (3)
 - Mitigation: Rigorous evaluations and prototyping.
4. **Security Vulnerabilities (CS):** Critical (5)
 - Mitigation: Regular security audits and penetration testing.