



North South University

CSE 327: SOFTWARE ENGINEERING Section: 05

PROJECT REPORT GROUP: 04

PROJECT TITLE

CholoGhuri: Event Organizer and Travel Mate Matching System

Submitted By:

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Submitted To:

Dr. Razib Hayat Khan (RHK1)

Asst. Professor, Department of Electrical & Computer Engineering
North South University

➤ **1 Project Statement Define**

We think about some real-life problems that can be solved. According to this idea, we explore some ideas which will be beneficial for people. Thus, we generate this idea. We aim to create a system that will help people manage events and find their best available travel mates easily. The system contains workshops, organizes events, Finds a Travel Partner, and Provides partial support for self-events/trips.

- **Contribution:** All

➤ **2 User Story Template**

This outlines four key user stories. These stories include user registration, requesting event/workshop planning, finding travel mates, and providing reviews and ratings. In each functionality, we try to guess what a user can do to use that functionality and the data required to access those functionalities. The user stories define the needs of different user types, such as regular and premium users, and specify the acceptance criteria for each feature. These user stories serve as a guide for the development team to prioritize tasks, and the system meets user requirements.

- **Contribution:** Wali Ullah, Zamil

➤ **3 Use Case Diagram**

This is a formal diagram to capture the functional behavior and high-level understanding of our system. The design is according to the user's perspective. It illustrates the various use cases or functionalities of the system and how the actors are involved in those use cases. It showcases the actions that users can perform, such as registration, event requests, finding travel mates, and giving reviews, while also highlighting the administrative tasks of handling events and approving reviews. This diagram is a valuable tool for stakeholders and development teams to understand the system's scope.

- **Contribution:** Showrov

➤ **4 UI/UX Design**

It contains the interface design of our system and focuses on creating visually appealing and interactive interfaces that users can interact with. It involves designing the layout, color schemes, typography, icons, and other visual elements. The goal is to create an interface that is visually appealing, consistent, and aligned with our service. We focus on understanding user behavior needs and plan to develop interfaces that are user-friendly, efficient, and enjoyable to use. The pages are Homepage, TravelMate, Event, Custom Event, Packages, service, Gallery, Review/rating.

Technology used: HTML, CSS, Bootstrap, javascript

- **Contribution:** Saiyem

➤ **5 Activity Diagram**

It shows the control flow from activity to activity and defines the dynamic behavior of features. We mapped the specific actions/tasks performed within the system and their flow of controls from one activity to another. An initial node is the start point of the activity diagram, and the final node represents the endpoint of the completion of activities. We add decision nodes to represent the transfer of flows through conditions. Depending on the outcome of the decision, the flow branches to different activities. Depending on transitions, there exists a parallel or concurrent flow of activities.

- **Contribution:** Zamil, Wali Ullah

➤ 6 CRC card

This design tool is used in object-oriented software development to outline the classes, their responsibilities, and their collaborations in our system. This information serves as a foundation for the design and implementation of the CholoGhuri system. By analyzing the CRC cards, it is evident that our system focuses on user registration, event management, travel mate matching, reviews, and administrative control. The cards help identify potential interactions and dependencies between classes, aiding the system design.

- **Contribution:** Saiyem, Showrov

➤ 7 Git and Jira Maintain

Git is a version control system, and JIRA is an issue tracker. Git provides version control, allowing teams to track changes, collaborate, and merge code seamlessly. It promotes parallel development, code reusability, and efficient collaboration. We updated codes and other necessary files on GitHub regularly. In JIRA, we completed every task within the time assigned by our SCRUM master. It enables us to plan, track, and manage our work effectively. Using Git and Jira, teams can enhance code management, streamline project planning, facilitate collaboration, and improve productivity throughout our software development lifecycle.

- **Contribution:** Git: Saiyem | JIRA: Wali Ullah, Zamil

➤ 8 CRC Class Compartments

The CRC class compartments for our CholoGhuri project outline the classes, attributes, and methods within our system. It also provides insights into the interactions and collaborations between classes, aiding the overall system architecture. These include User, TravelMate, CustomizedEvent, AdminUser, Review, and Event. Each class has specific responsibilities for managing user information, travel dates, customized events, administrative privileges, user reviews, and event details. The class compartments provide a foundation for our system design and implementation, facilitating the development process and ensuring a well-structured and cohesive system.

- **Contribution:** Showrov, Saiyem

➤ 9 Class Diagrams

The class diagram depicts the structure and relationships of classes in a system. The diagram includes three main classes: Admin, User, and Server. The Admin class is associated with managing enrolled events and managing users, while the User class is linked to requesting events, searching for travel mates, and viewing and posting reviews. The Server class is responsible for checking the premium user status, displaying events, posting reviews, and handling registrations. The diagram also showcases the relationships between the classes, such as the one-to-many relationship between Admin and Enroll Event, the one-to-many relationship between User and Request Event, and the many-to-many relationship between User and Travel Mate. Overall, the class diagram provides an overview of the system's class structure and associations.

- **Contribution:** Showrov

➤ 10 Effort and Budget Estimation

The budget estimation report for our project provides a detailed breakdown of anticipated expenses and profit margins. An effort of 29 person-months and a development time of 9 months are determined, requiring a team of 4 members using the Organic approach. The expenses are divided into requirements analysis, development, transportation, training and equipment, rental, and maintenance. The estimated expenses include BDT 48,11,320 for the project, with an additional profit of BDT 9,62,264. The total project budget amount is BDT 57,73,584. This report is a valuable tool for financial planning, resource allocation, and cost management, ensuring the project's economic viability and sustainability.

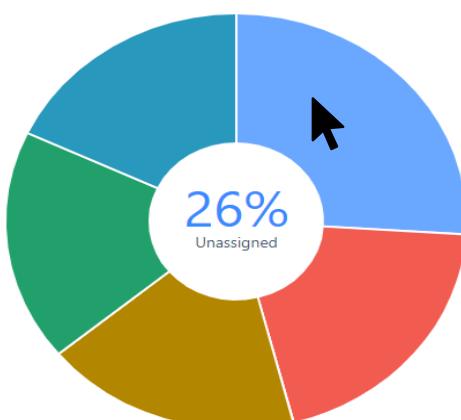
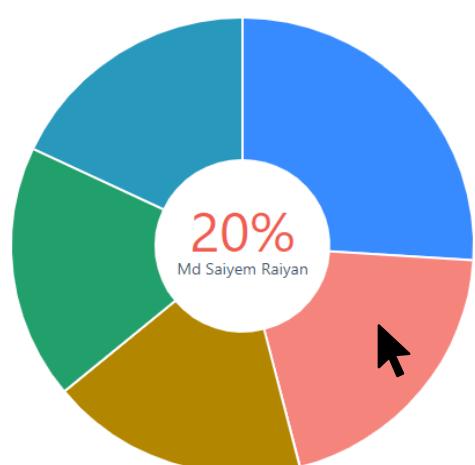
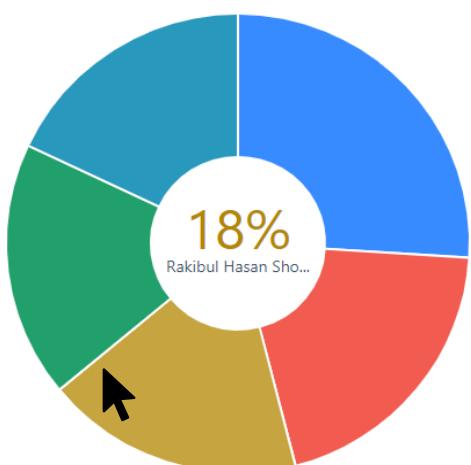
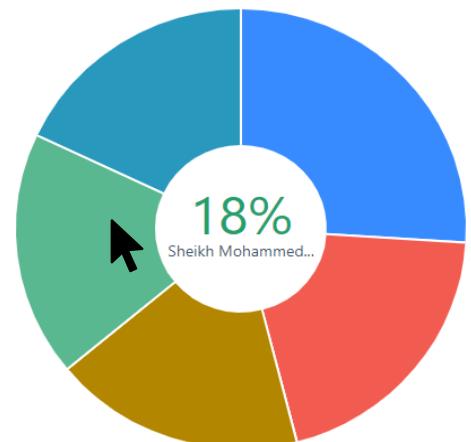
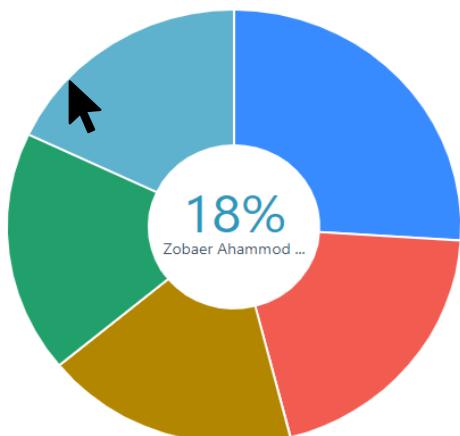
- **Contribution:** Zamil

► 11 Project Timeline Chart

The chart showcases the key milestones and activities involved in the project. The timeline chart provides an organized visual representation of our project's progress. It includes a horizontal axis representing the time duration (per week) of the project and a vertical axis displaying the different activities and milestones. The chart helps to understand the sequence and duration of each task. The chart is essential for project management and planning. It helps team members track the project's progress and ensures activities are completed within the allocated timeframes. By visually representing the project timeline, it enables effective scheduling, resource allocation, and coordination among team members. The names of the team members who worked on the project were Wali Ullah, Zamil, Showrov, and Saiyem.

- **Contribution:** Wali Ullah, Zamil

Individual Contribution In the System (JIRA Pie Chart):



Unassigned →

User Story Template

Title: <i>User Registration</i>	Priority: <i>High</i>	Estimate: <i>2 person, 6 days</i>
<p>As a Regular User</p> <p>I want to perform registration in the CholoGhuri</p> <p>so that I can access various service provided by CholoGhuri</p>		
<p>Acceptance criteria</p> <p>Given my basic info: <i>Name, Phone, DOB, NID, email, password</i></p> <p>When I submit my information</p> <p>Then I will get a confirmation code in my email to verify my account to be a verified user</p>		
<p>Platform: Cross Platform (Desktop, Mobile)</p> <p>Language/framework: JavaScript, Django, Flutter</p>		

Aha!

[Click here to manage your user stories in Aha! free for 30 days.](#)

User Story Template

Title: <i>Requesting Event / Workshop Planning</i>	Priority: <i>High</i>	Estimate: <i>3 person, 20 days</i>
<p>As a Premium user</p> <p>I want to request existing event planning or new events or workshop with specific requirements</p> <p>so that I can arrange an event or workshop</p>		
<p>Acceptance criteria</p> <p>Given specific requirements such as <i>the number of people, event theme, food, transport, accommodation</i></p>		
<p>When I submit that information</p> <p>Then a new event/workshop request will create.</p>		
<p>Platform: Cross Platform (Desktop, Mobile)</p> <p>Language/framework: JavaScript, Django, Flutter</p>		

Aha!

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User Story Template

Title:	Priority:	Estimate:
<i>Find travel mate</i>	High	3 person, 30 days
<p>As a mixed user (regular, premium)</p>		
<p>I want to search for travel mates (for all users) and make connections among them (only for premium users)</p>		
<p>so that I can get my desired travel mate</p>		
<p>Acceptance criteria</p>		
<p>Given the <i>available time range, desired location, age, gender</i></p>		
<p>When I submit that information</p>		
<p>Then find desired travel mates</p>		
<p>Platform: Cross Platform (Desktop, Mobile)</p>		
<p>Language/framework: JavaScript, Django, Flutter</p>		

Aha!

[Click here to manage your user stories in Aha! free for 30 days.](#)

User Story Template

Title: <i>Review and Rating</i>	Priority: <i>Medium</i>	Estimate: <i>2 person, 5 days</i>
<p>As a <i>mixed user (regular, premium)</i></p> <p>I want to give reviews about events, event organizers, and travel mates</p> <p>so that I can determine the quality of this system</p>		
<p>Acceptance criteria</p> <p>Given review info such as <i>user name, event name, and review/comments about them</i></p> <p>When after participating in an event or workshop or tour</p> <p>Then post a review and get a confirmation pop-up.</p>		
<p>Platform: Cross Platform (Desktop, Mobile)</p> <p>Language/framework: JavaScript, Django, Flutter</p>		

Aha!

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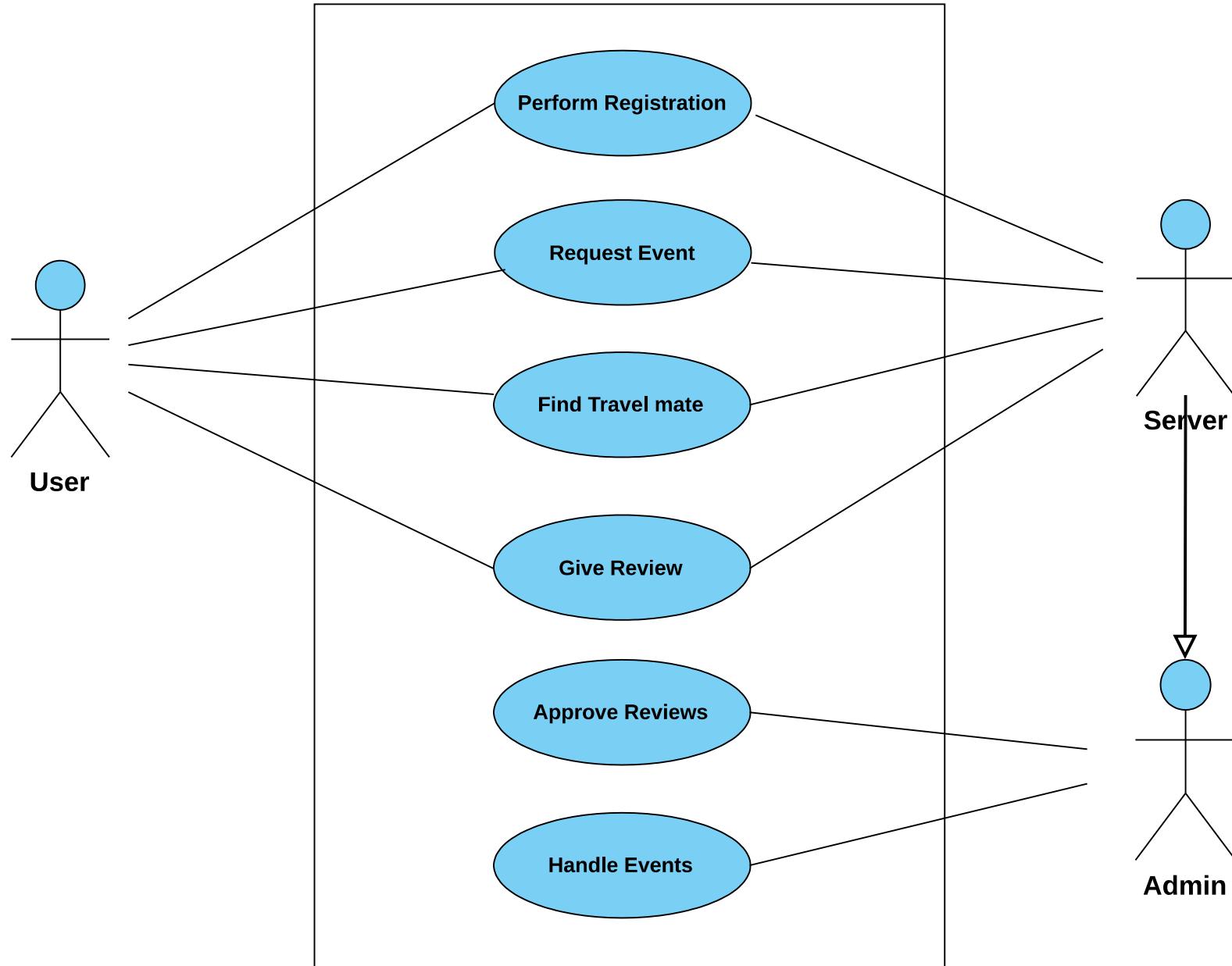
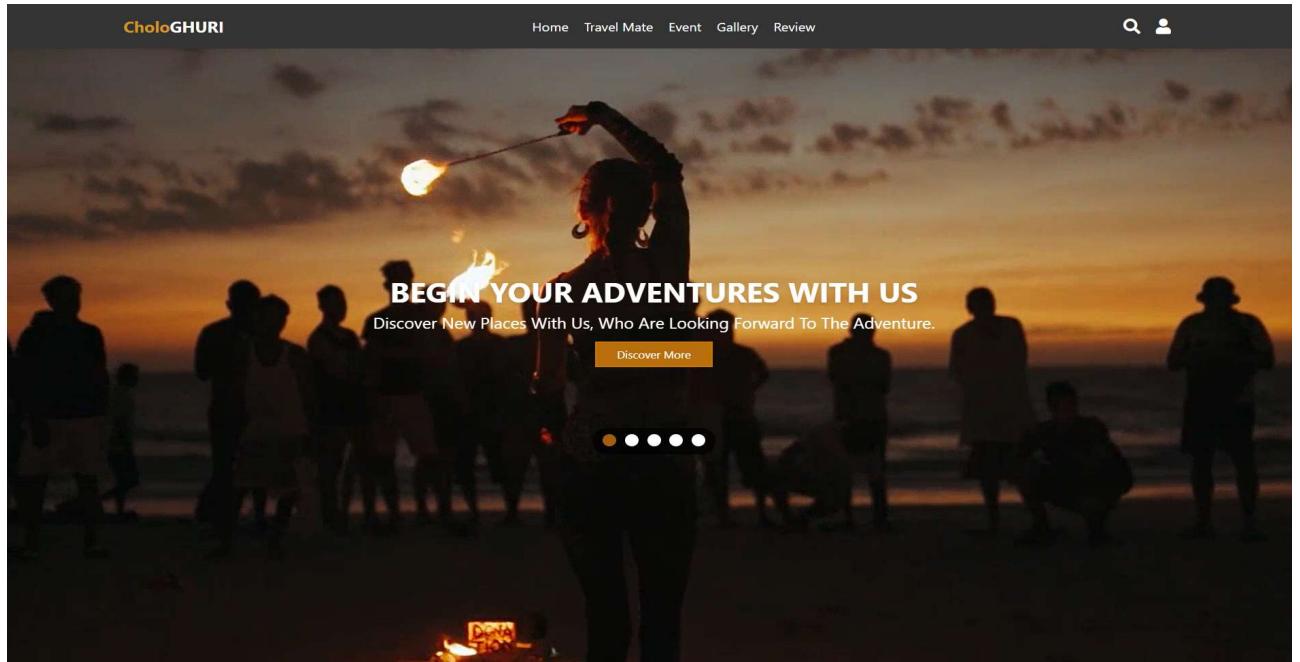


Figure: Use Case Diagram

Home Page:



Login and Registration:

The image displays two side-by-side registration and login forms. On the left, a purple-themed panel contains the text "Already have an account" and a "Please Login" link, with a blue "Signin" button below it. On the right, a white-themed panel has a "Create An Account" section with fields for "User Name", "NID", "Phone No.", "Email", "Address", and "Password", along with a "Create Account" button at the bottom. Above this, a "Login" section includes fields for "Email" and "Password", a "Forgot your password?" link, and a "Login" button. Both sections feature social media login options for Facebook and Google. To the right of the white panel, a yellow-themed panel encourages users to "Start Your Journey with Us" and features a blue "Sign Up" button.

Event Pages:

(Fixed Event Plans For All Users)

CholoGHURI

Home Travel Mate Event Gallery Review

P A C K A G E S

Search Events... Search

S P C I A L P A C K A G E S

Wedding Package
Make Your Special Day Unforgettable With Our Customized Wedding Packages.

[Learn More](#)

Party Package
Celebrate In Style With Our Party Packages Designed For All Occasions.

[Learn More](#)

Workshop Package
Host Productive Workshops And Training Sessions With Our Expertly Crafted Packages.

[Learn More](#)

Other Packages
Explore A Variety Of Packages To Suit Your Unique Travel Needs And Preferences.

[Learn More](#)

Sundarban
The Sundarbans Is A Vast Mangrove Forest Located In Bangladesh Known For Its Rich Biodiversity And Being The Habitat Of The Bengal Tiger.
 4000/-
[Book Now](#)

Cox's Bazar
Cox's Bazar Is A Coastal Town In Bangladesh Characterized By Its World's Longest Natural Sea Beach And For Its Beauty.
 5000/-
[Book Now](#)

Rangamati
Rangamati Is A Picturesque District In Bangladesh Characterized By Its Stunning Hill Landscapes, Lush Greenery, And Serene Kaptai Lake.
 6500/-
[Book Now](#)

Ratargul Forest Gump
Ratargul Is A Hidden Gem In Bangladesh A Freshwater Swamp Forest Located In Gowainghat, Sylhet, Known For Its Crystal-Clear Water And Thriving Biodiversity.
 7000/-
[Book Now](#)

Saint Martin
Saint Martin's Island Is A Tranquil Tropical Paradise In The Bay Of Bengal, Known For Its Pristine Beaches, Coral Reefs, And As The Only Coral Island In Bangladesh.
 9000/-
[Book Now](#)

Sajek Valley
Sajek Valley Is A Breathtaking Hill Station In Bangladesh Offering Stunning Panoramic Views, Lush Green Landscapes, And A Serene Escape Into Nature.
 7500/-
[Book Now](#)

(Custom Event Plans For Premium Users)

CholoGHURI

Home Travel Mate Event Gallery Review

C U S T O M E V E N T

Name

Address

NID no.

Place

Email

Phone no.

You Budget Range

Food Menu

What's you want? Suggestions please...

[Send Message](#)

Travel Mate Find Page:

The screenshot shows a search bar at the top with the placeholder "Search here....". Below it is a large search input field with the placeholder "place name". To the right of the search fields are buttons for "Location", "Partner's Age Range" (set to 18-25), "Partner's Gender" (set to Male), "From" (date mm/dd/yyyy), "To" (date mm/dd/yyyy), and a "Find" button. The background features a cartoon illustration of a man sitting on a green suitcase, holding a smartphone displaying a hotel booking app interface.

Services, Adventure and Gallery:

The screenshot shows a navigation bar with "CholoGHURI" and links for Home, Travel Mate, Event, Gallery, and Review. Below the navigation is a "SERVICES" section with five categories: "Affordable Hotels" (icon of a building), "Food And Drinks" (icon of a fork and knife), "Safty Guide" (icon of a speech bubble), "Around The Country" (icon of a globe), and "Faster Travel" (icon of an airplane). Each category has a brief description and a small image. Below this is a "GALLERY" section with a grid of ten images showing various travel scenes.

Affordable Hotels
Seeking Wallet-Friendly Accommodations? Explore A Variety Of Budget-Friendly Hotels That Offer Comfortable Rooms, Ensuring An Enjoyable Stay Without Straining Your Finances. Travel Affordably Without Sacrificing Comfort.

Food And Drinks
Indulge In The Vibrant Culinary Tapestry Of Your Travel Destination, Savoring Local Flavors And Exotic Delights That tantalize Your Taste Buds. From Street Food To Fine Dining, Let Your Journey Be A Gastronomic Adventure Of Unforgettable Meals And Refreshing Drinks.

Safty Guide
Plan Your Travels With Confidence By Following A Comprehensive Travel Safety Guide. Equipped With All The Necessary Travel Information To Ensure A Secure And Worry-Free Journey Wherever You Go. Prioritize Your Well-Being While Exploring The World.

Around The Country
Embark On A Thrilling Adventure Around Bangladesh. Where Diverse Cultures, Breathtaking Landscapes, And Unique Experiences Await At Every Turn, It's A Journey That Broadens Horizons And Creates Lifelong Memories. Transcending Borders And Boundaries.

Faster Travel
In Today's Fast-Paced World, Travel Has Become Faster Than Ever. With High-Speed Trains, Airplanes, And Advanced Technology Advancements Reducing Distances And Bringing Distant Destinations Closer Together. Embrace The Rapid Pace Of Modern Travel To Maximize Your Exploration Opportunities.

Adventure
Embark On Thrilling Adventures In Bangladesh. From Trekking In The Lush Hills To Navigating Its Intricate Waterways, And Immerse Yourself In The Country's Natural Wonders With An Adrenaline-Pumping Experience.

Review:

CholoGHURI

Home Travel Mate Event Gallery Review

Search 

REVIEW

Search Name...

Search

Give Review

Review Given By Users



Zobaer Zamil

I Had An Incredible Trip With The Partner I Met Through This Platform. Very Prompt And Trustworthy. Great Communication From The Moment We Booked. When Our Flights Were Changed, Resulting In A Day Less, It Was Sorted Quickly And Effectively With One Phone Call.



RH Showrov

Thanks To Their Assistance, I Was Able To Find Affordable Lodging In A Timely Manner. Booking Travel Was Easy And Staff Were Very Helpful. Great That We Could Pay Off Holiday With Instalments. So Finally, It Was A Great Journey



Saiyem Raiyan

Consultant Tailored Our Requirements To Fit Our Timeline And Budget. We Can Highly Recommend TravelOnline. Timely Booking And Provision Of Travel Documentation, Plus Follow Up To Make Sure We Were Happy..



Sheikh Mahir

Fabulous Service And Great To Deal With. Hc Excellent Value For Money And Confirmation Payment And Holiday Comin Up Were Well Or Will Definitely Use Again.



About

Nestled In South Asia, Bangladesh Beckons With Its Stunning Ganges-Brahmaputra Delta. A Mosaic Of Fertile Plains And Waterways, Dhaka, The Bustling Capital, Showcases A Blend Of Historical Treasures Like Lalbagh Fort And Modern Urban Life. The World's Longest Natural Sea Beach Graces Cox's Bazar, While Sylhet's Tea-Carpeted Hills And Rangamati's Serene Lakes Provide Picturesque Escapes. Sample The Flavorful Bengali Cuisine, From Aromatic Biryani To Sweet Treats Like Rosogolla. Immerse Yourself In Local Life By Partaking In Village Tourism, Embracing The Warm Hospitality And Traditional Crafts. Experience vibrant Festivals And Respect Customs For A Truly Enriching Journey Through This Diverse Nation.

Travel Place

- ☛ Cox's Bazar
- ☛ Saint Martin
- ☛ Sundarban
- ☛ Ratargul
- ☛ Bandarban
- ☛ Sajek Valley
- ☛ More Places...

Quick Link

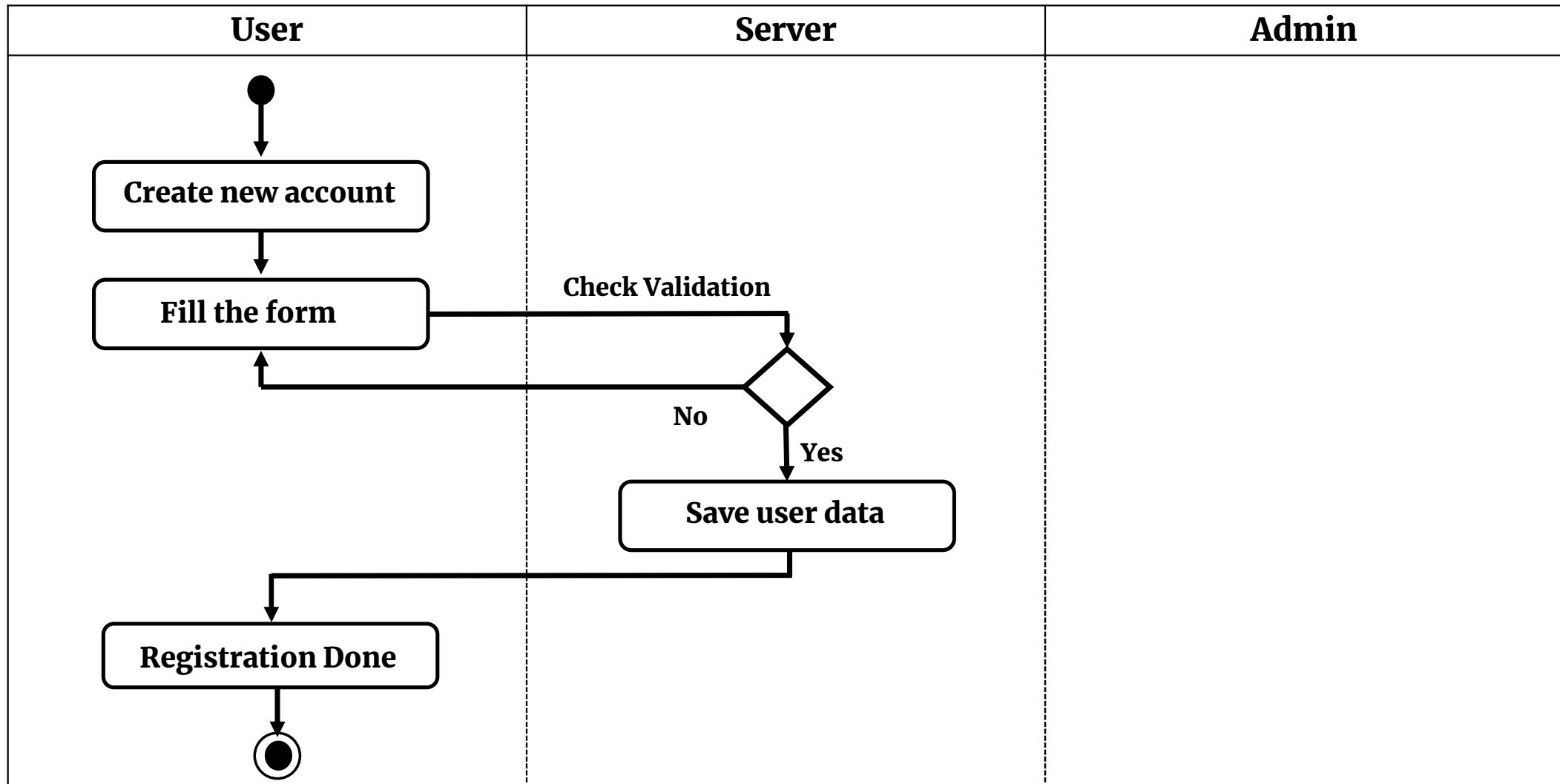
- [Home](#)
- [Travel Mate](#)
- [Event](#)
- [Services](#)
- [Gallery](#)
- [Review](#)

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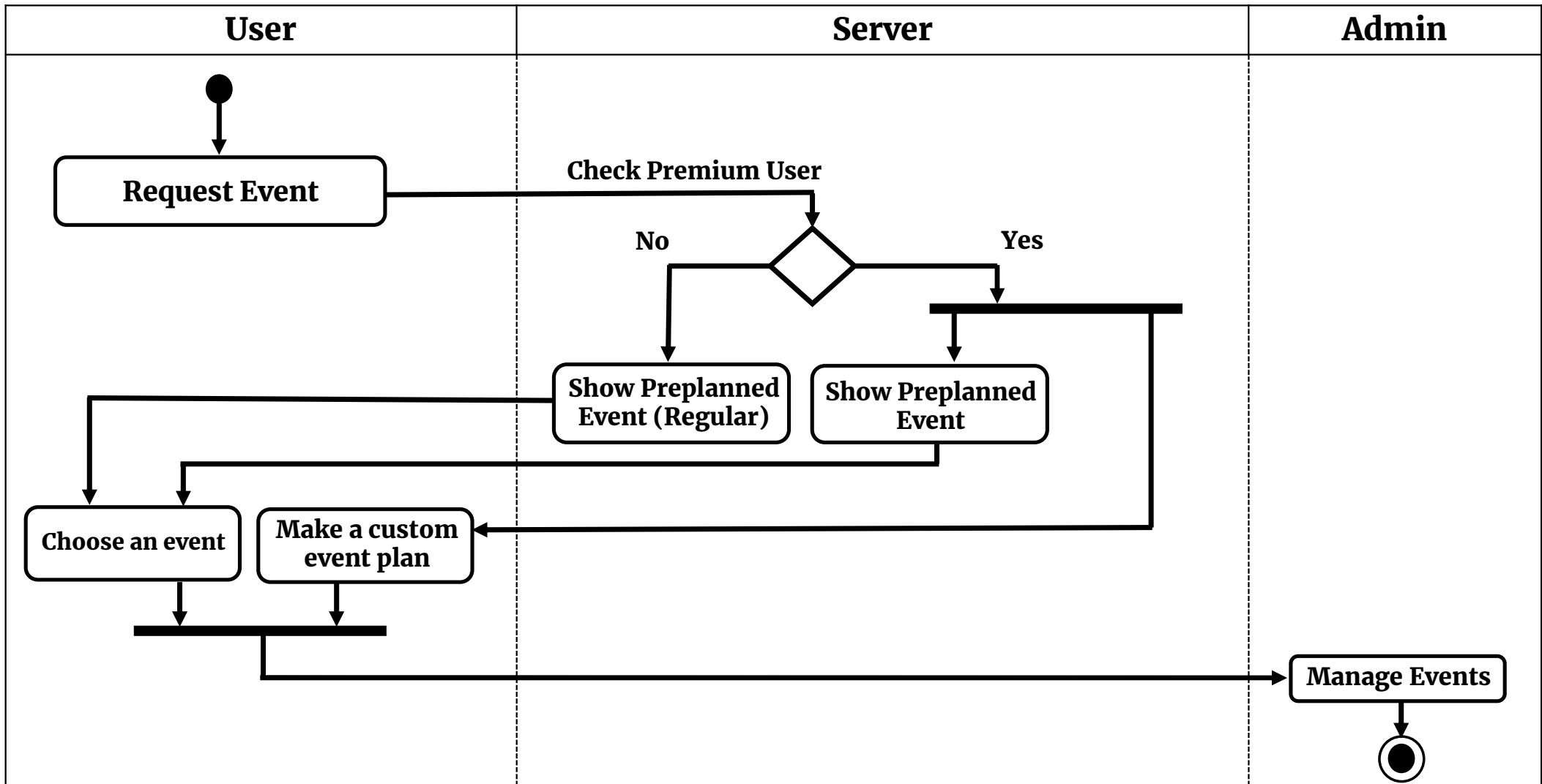
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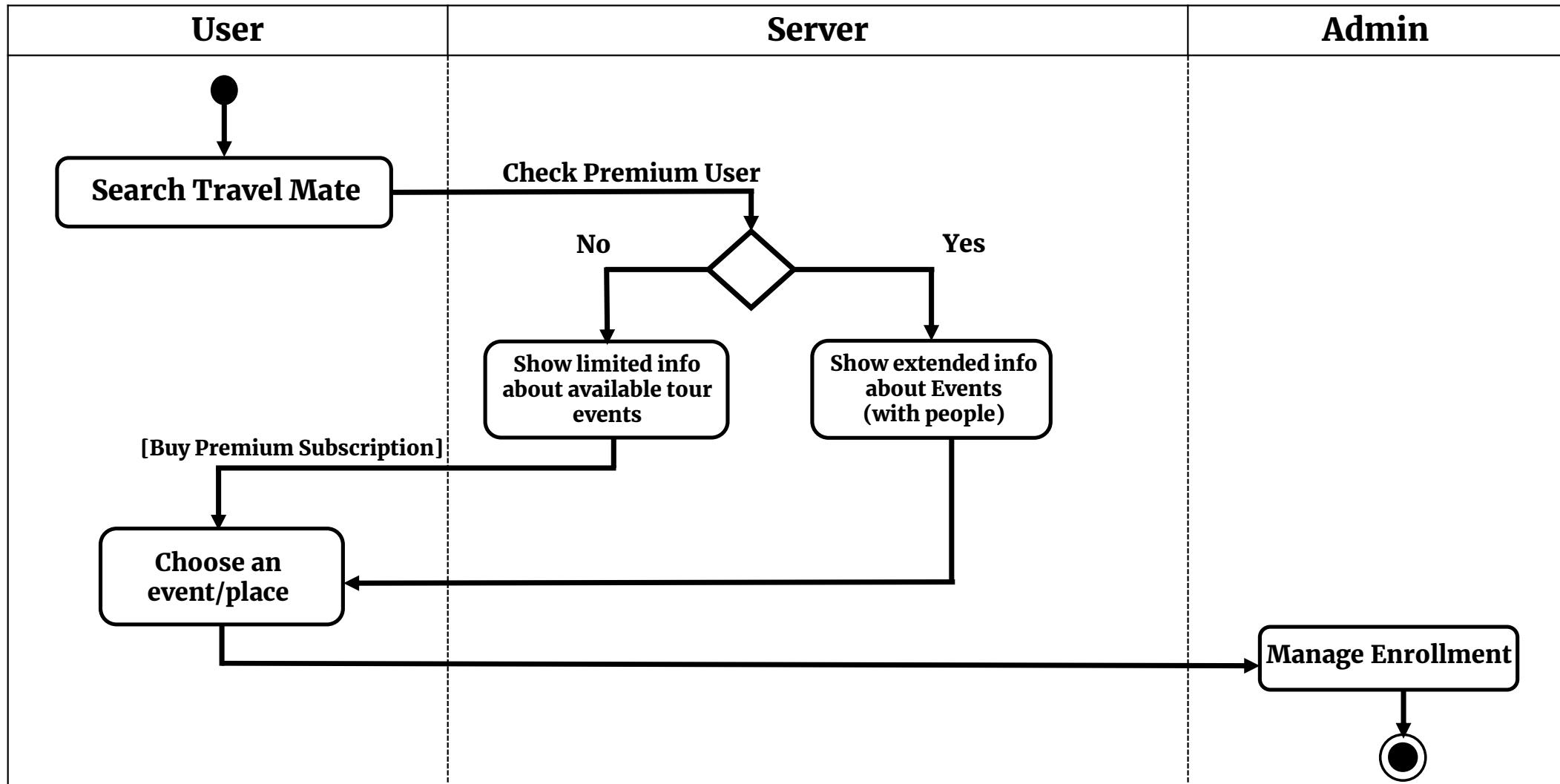
Perform Registration



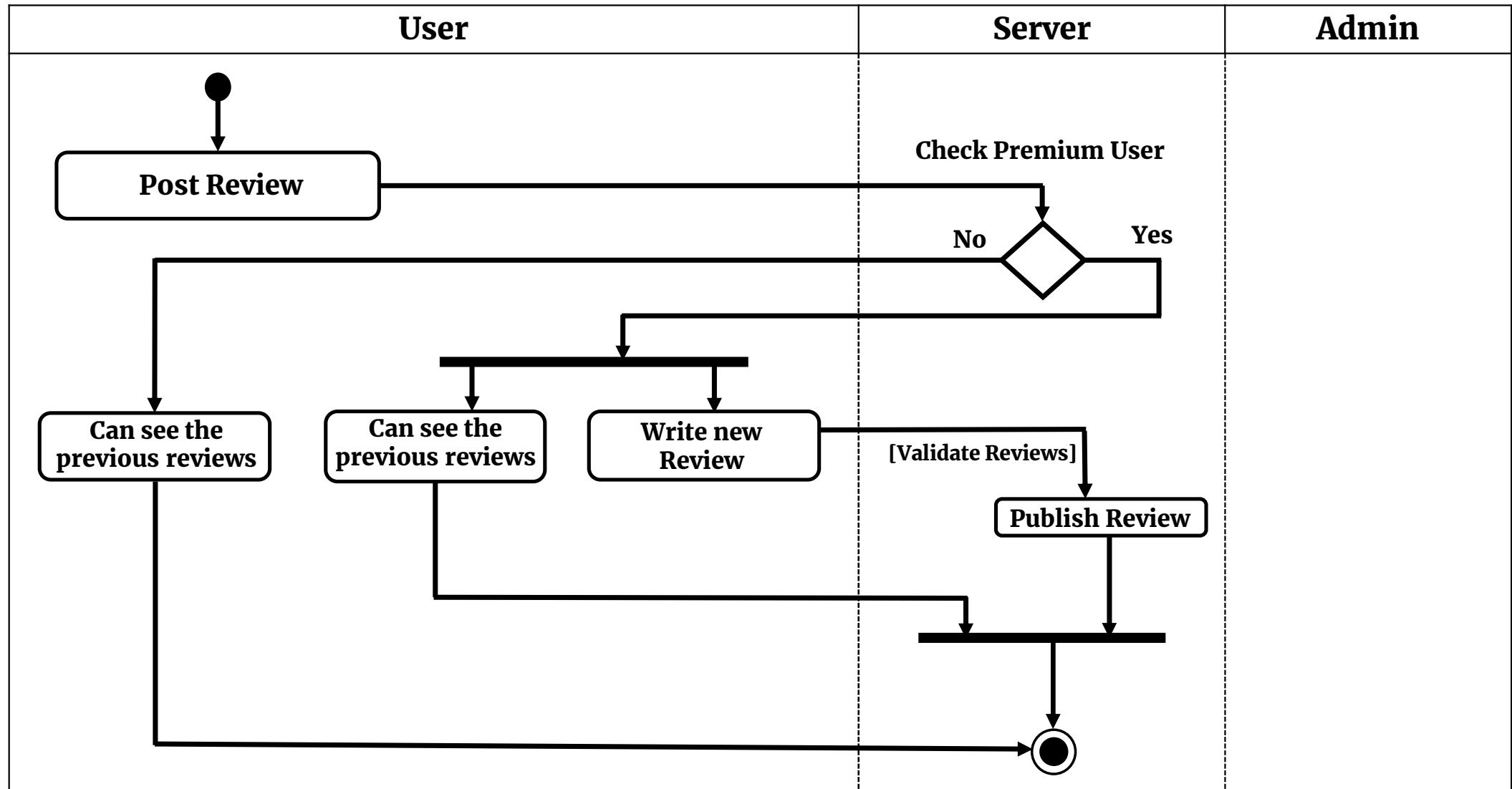
Request Event



Find Travel Mate



Give Review



Class: User

Description: Perform User Registration and saving the user information

Superclass:

Subclasses: *TravelMate, AdminUser*

Responsibility	Collaborator
Register for an account.	
Request to join or create events.	Event
Find travel mates.	TravelMate
Give reviews to travel mates.	Review

Class: Event	
Description: user can create and select event based on their subscription	
Superclass:	
Subclass: <i>CustomizedEvent, TravelMate</i>	
Responsibility:	Collaborator:
Customize event request	CustomizedEvent
Manage event details (date, location, description, etc.)	
Allow users to join or leave events	TravelMate
Display a list of users attending the event.	User

Class: TravelMate

Description: User can search any event and can see the insight of event/tour

Superclass: User, Event

Subclass:

Responsibility:	Collaborator:
Provide information about (interests, preferences, travel history, etc.)	User
Match users with potential travel mates based on compatibility.	Event
Can give review about travel mates	Review

Class: Review

Description: Give review and based on review generate ratings for users

Superclass: *Event, User*

Subclasses:

Responsibility:	Collaborator:
User can create and view reviews	User
Allow users to rate and write reviews for travel mates and Event	TravelMate
Give review about events	Event

Class: CustomizedEvent

Description: user can create customized event request based on their subscription

Superclass: Event

Subclass:

Responsibility:	Collaborator:
User can make request for customized event	User
Can add some of the familiar travel mates	TravelMate

Class: AdminUser

Description: Managing User and their actions/request

Superclass: User

Subclasses:

Responsibility	Collaborator
Control the permission of other users	User
Approve preplanned event request	Event
Update review board if reported	Review
Approve customized event request	CustomizedEvent
Remove User	User

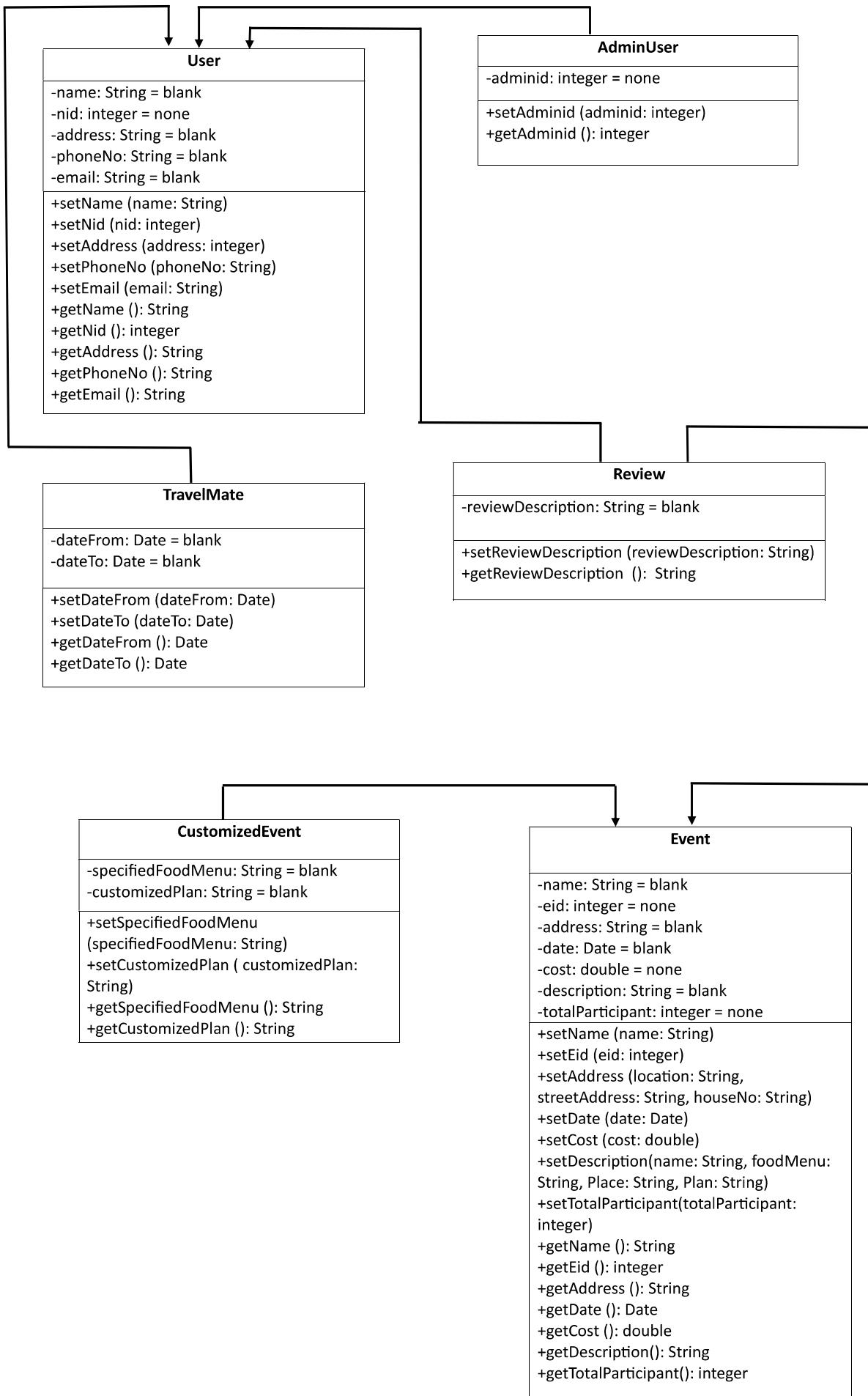


Figure: CRC Class Compartments

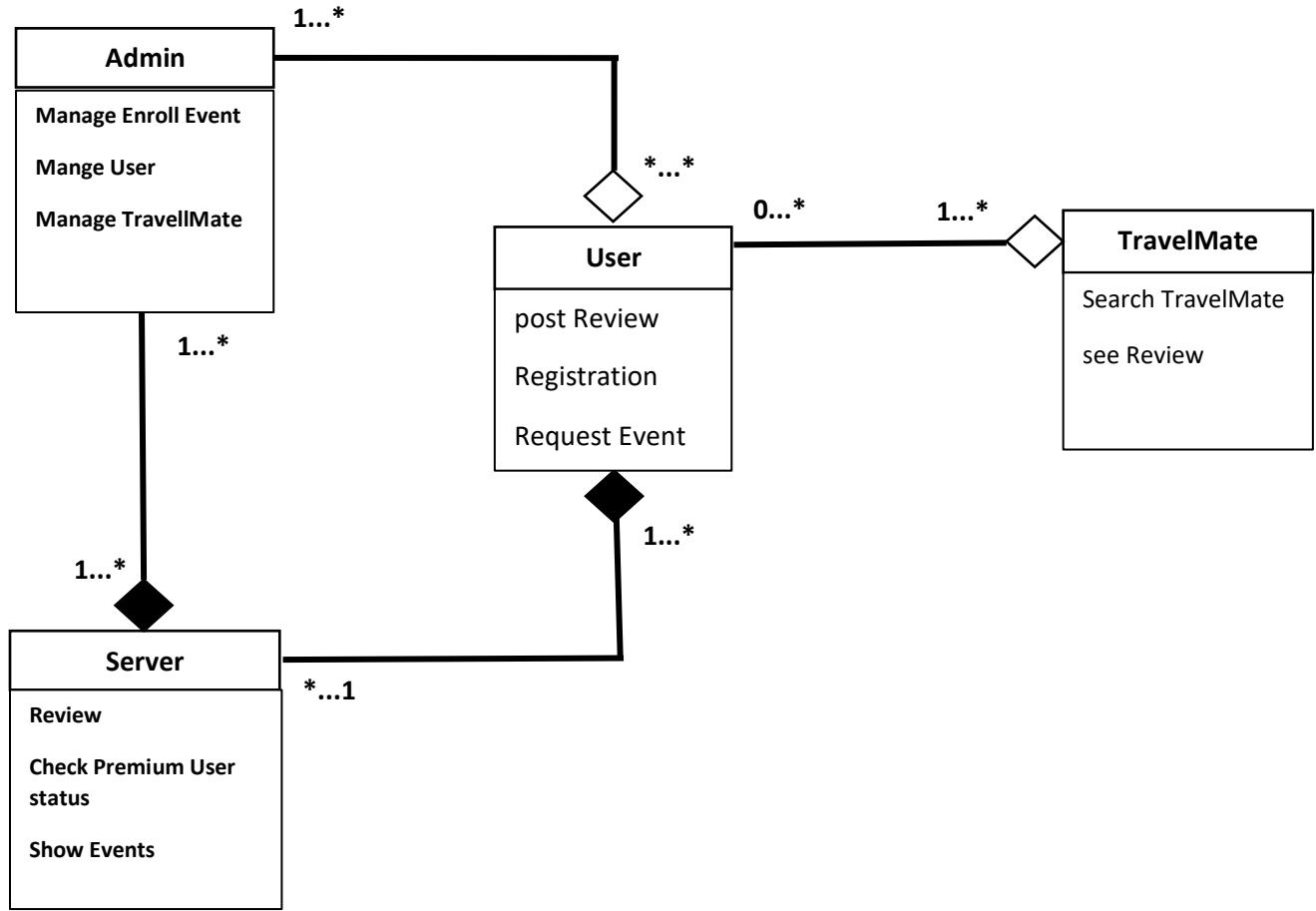


Figure: Class Diagram

CholoGhuri: Event Organizer and Travel Mate Matching System

Effort Estimation:

Project Type:	Organic
Coefficient _{<Effort Factor>}	: 2.4 [P = 1.05, T = 0.38]
SLOC	: 10,400
Effort	= Person-Months (PM) = <i>Coefficient_{<Effort Factor>}</i> * (SLOC/1000) ^P = 2.4 * (10400/1000) ^{1.05} = 28.06 ~ 29
Development time	= DM = 2.50 * (PM) ^T = 2.50 * (29) ^{0.38} = 8.987 ~ 9 months
Required people	= ST = PM/DM = 29/9 = 3.222 ~ 4

Requirement Analysis Budget:

The time needed	= 1 month	= 22 Working days	= 176 hours
Salary Per Working Hour for req. analyst	= BDT 450		
Total expenses for requirement analysis	= BDT 450 * 176 = BDT 79,200		

Development Budget:

Salary Per Working Hour for developer	= BDT 650
Working days per month	= 22 days
Total working hours	= 9 * 22 * 8 hours = 1,584 hours
Total Salary of Developer	= BDT 650 * 1,584 * 4 = BDT 41,18,400

Transportation Budget:

Estimated Transportation Cost	= BDT 1,26,720
-------------------------------	-----------------------

Training & Equipment Budget:

Estimated Training & Equipment Cost	= BDT 1,60,000
-------------------------------------	-----------------------

Rental Budget:

Office space rent per month	= BDT 25,000
Time	= 9 months
Rent Cost	= BDT 25,000 * 9 = BDT 2,25,000
Total Utilities in 9 Months	= BDT 30,000
Total rental cost	= BDT 2,55,000

Maintenance Budget (Till 6 Months after Delivery):

Total Time needed (3 hours in a week)	= 6 * 4 * 3 hours = 72 hours
Cost per hour	= BDT 1000
Total maintenance cost	= BDT 1000 * 72
	= BDT 72,000

$$\begin{aligned} \text{Total Estimated Expenses} &= 79,200 + 41,18,400 + 1,26,720 + 1,60,000 + \\ &\quad 2,55,000 + 72,000 \\ &= \mathbf{BDT \ 48,11,320} \end{aligned}$$

Profit:

Profit	= 20% of Total Expenses
	= 20% of BDT 48,11,320
	= BDT 9,62,264

Grand Total:

$$\begin{aligned} \text{Project Budget} &= \text{BDT } 48,11,320 + \text{BDT } 9,62,264 \\ &= \mathbf{BDT \ 57,73,584} \end{aligned}$$

Timeline Bar Chart:

Weeks \ Task: Person	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
A: All Member																	
B: Zamil																	
C: Showrov																	
D: Saiyem																	
D: Wali Ullah																	
D: Zamil																	
E: Wali Ullah																	
E: Zamil																	
F: Showrov																	
F: Saiyem																	
G: Showrov																	
G: Saiyem																	
G: Zamil																	
H: Wali Ullah																	
I: Showrov																	
I: Wali Ullah																	
J: Zamil																	
K: Zamil																	
L: Saiyem																	
M: Wali Ullah																	
N: Showrov																	
O: Wali Ullah																	
P: Zamil																	
Q: Saiyem																	
R: Wali Ullah																	
S: Saiyem																	
S: Showrov																	

Task List:

A: Project Statement Define	H: Git & Jira Maintain	N: Code Travel mate Finding Module
B: User Story Template	I: Class Diagram	O: Code Review Module
C: Use Case Diagram	J: Effort Estimation	P: Code Admin Management Module
D: UI/UX Design	K: Budget Estimation	Q: Integration Testing
E: Activity Diagram	L: Code Registration module	R: System Testing
F: CRC Card	M: Code Event Module	S: Documentation
G: Class Compartments		

Timeline Chart: