

SOFTWARE ENGINEERING

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REPORT 1

Party Safari

Presented by Westra Tech (GitHub)		
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Business Concepts, Operations, and Business Rules

Project Description

Party Safari is a map-centric web application that allows users to locate and discover events and parties nearby. Our application caters to two main user groups, as described below.

Regular users, or partygoers, can navigate a map—akin to Google Maps—with individual icons dotting the map representing parties hosted in the area. When partygoers select an icon, comprehensive information about that party is displayed, including address, time, admission fees, and more. Alternatively, partygoers can use a text-based search to find specific listings using the name of a party host, location, or keywords detected in the party’s description. To RSVP for a party, users must register with the platform, including options like logging in through external apps such as Google or Facebook. Once registered with a unique account ID, partygoers can RSVP to parties/events. Then, the party will be added to their shopping cart. When satisfied, they can check out their cart, which will redirect to our payment processing system if there is a fee for the party/event; upon successful payment, they will be issued a ticket number or QR code associated with their account ID to present for admission to the party. After the party concludes, partygoers can write a review on the host, giving ratings on various categories like safety and cleanliness.

Unlike partygoers, party hosts may utilize the app to host events. To ensure a secure community, hosts must be registered and verified. To become verified, hosts will complete an application and undergo a reviewing process, where they must send us documents that prove their legitimacy. Hosts can access their own dashboards once verified, allowing them to create new party listings on the map. They can view their organizations’ reviews, ratings, and open parties. Upon revenue generation, hosts can select their preferred payout method within their dashboard, with payouts processed at the end of the month. Lastly, a space for advertisements will be available on the party hosts’ dashboard. Companies that sell products these party hosts would be interested in may choose to advertise their products directly there.

Data Collections

Availability	Capabilities and Constraints
Visitors (Unregistered Users)	<ul style="list-style-type: none">• Map data collection: consists of markers and icons to nearby parties• Party listings data collection: contains all the information about each party (e.g., date, time, admission fees, dress codes, maximum capacity, etc.)• Host information party data: consists of data on the hosts’ profiles (e.g., descriptions, fees, contact info, social media links, etc.)• Discounted parties data collection: includes original price, discounted price, party ID, and period of the discount.

Availability	Capabilities and Constraints
Registered Users	<ul style="list-style-type: none"> • User profile data collection: contains editable and readable (by account owners) data on users (e.g., name, email address, phone number, party history, setting preferences, notification settings, etc.) • Reviews data collection: holds all reviews and ratings on the various hosts • Notifications data collection: holds all notifications for each user • “Favorites” data collection: contains the favorite party host(s) for each user • Shopping cart data collection: all the parties the user has in their cart • Parties attending data collection: stores all parties the user has paid for and is planning to attend as well as parties the user has attended in the past • Party updates/changes notification data collection: contains records of messages and notifications sent by the party host about updates/changes regarding the party. • Tickets/QR codes data collection: stores generated tickets/codes for parties that users RSVP, holds old tickets as well. • Payment history data collection: maintains a history of all payments made by registered users for tickets and payouts to party host. • Shared parties data collection: Holds records of parties that registered users have shared on social media platforms
Party Hosts	<ul style="list-style-type: none"> • Party creator data collection: contains the following data: <ul style="list-style-type: none"> ○ Host reviews data collection: contains all the host’s reviews ○ Party data collection: holds the host’s current and historical parties ○ Attendance list data collection: stores users who purchased party tickets ○ Search data collection: holds highly searched keywords ○ Payment data collection: contains the host’s balance (viewable by host) ○ Promotions data collection: contains data related to promotions run by the party host such as promotional start/end dates, cost, and party ID

Data Operations

User Type	Capabilities and Constraints
Unregistered	<ul style="list-style-type: none"> • Can view parties on a map using map data collection • View party details from party listing data collection • Read host information from host information data collection • View discounted parties data collection • View reviews data collection • Can search for specific hosts/parties based on location, date, age restriction, etc. <ul style="list-style-type: none"> ○ Results can be sorted/filtered by distance, review score, etc.

User Type	Capabilities and Constraints
Registered	<ul style="list-style-type: none"> • Upon registration, a new entry is added to the user profile data collection; users can modify it at any time • Add/drop parties from cart updates the shopping cart data collection • RSVP to parties modifies the party listings data collection by decreasing availability and adds the party to the user profile data collection. Adds their ticket/QR code to party attendance data collection. • Add/remove hosts from favorites data collection • Enable/disable notifications, modifying notifications data collection • Reviews data collection modified when users add/delete/update reviews
Party Host	<ul style="list-style-type: none"> • Create new parties, adding a listing to the party listing data collection and entry to map data collection <ul style="list-style-type: none"> ○ Adds the party to the active party data collection for the party host ○ Hosts can continue to modify party data, writing to respective collections • Can read their reviews from the reviews data collection • Can modify their information in their host data collection • Can access the attendance list data collection when scanning users' tickets • Can access balances via payment data collection; also allowing for payouts

Business Policies for Accessing/Updating Data Collections

Regarding the shopping cart data collection, parties can be in users' cart for a maximum of fifteen minutes before it is removed from the cart to ensure fairness for all users. Parties remain in the user's cart even if they leave the website. Refunds can be made up to 24 hours before the party's scheduled start time. Within those 24 hours, no refunds can be made. Visitors must register for an account to add parties to their cart, write reviews, and get access to most data collections. Users must go through an authentication system when registering. User profile data is private; only the user can view and edit their profiles. The reviews data collection should not contain offensive content and users can only review parties they have bought. There is no tax applied at checkout, however, the website will deduct a four percent processing fee per ticket from the party host's revenue. Party hosts will get the remaining amount for each party ticket sold.

Text-Based Searches

Users will have access to a search bar on the map page, where they can search for location, party host, and party description. They can then filter those search results based on attributes like proximity to current location, prices/fees, ratings, etc. Party hosts will also have search functionality on their dashboard, where they can search through their previously posted listings, previous payouts (if any), tickets for a specific party, and reviews.

Utilized Data Sources/APIs

- **Synthetically created data** for party listings data collection; our operations do not depend heavily on accurate values or precise real-world data.
 - Organizations create party data, meaning no API is used to pull such data.

- **Maps:** Google Maps API
- **Payment:** Stripe/PayPal
- **Advertisements:** Google AdSense
- **Notifications:** Twilio SendGrid API
- **Account Registration:** Google, Facebook, Apple API

System Requirements

User Story Requirements

ID	Requirement	Team
1	<p>As an unregistered or registered user, I want to view parties on a map so that I can see the location of each party.</p> <ul style="list-style-type: none"> • Business Concepts: View available parties • Operations: Visit website • Business Rules: Users do not need to have a registered account to view available parties • Third-Party APIs: Google Maps API will be used to display a map of available nearby parties 	1
2	<p>As an unregistered or registered user, I want to view party details so that I can learn more about the party such as the theme, price, availability, and reviews.</p> <ul style="list-style-type: none"> • Business Concepts: View party listing details • Operations: Visit website, click on party marker on the map, view party details • Business Rules: Users do not need to have a registered account to view party details 	
3	<p>As an unregistered or registered user, I want to read host information so that I can know more about the host's background, rating, and contact details.</p> <ul style="list-style-type: none"> • Business Concepts: View party host information • Operations: Click on party marker and then click on party host to get more information • Business Rules: Users do not need to have a registered account to view party host information. Party hosts need to have registered and verified accounts to edit their information. 	
4	<p>As an unregistered or registered user, I want to view discounted parties so that I can find the best deals and save money.</p> <ul style="list-style-type: none"> • Business Concepts: View discounted parties, • Operations: Filter party map to show only the discounted parties • Business Rules: All users, registered or not, may view discounted parties and their original price. Party hosts can set and edit their discounted prices in their party host dashboard 	

ID	Requirement	Team
5	<p>As an unregistered user or party host, I want to register for an account to personalize my experience and access more features.</p> <ul style="list-style-type: none"> • Business Concepts: Register for an account • Operations: Go through a registration process through Party Safari's account creation system or a third-party API • Business Rules: To access and modify most data collection features within the website, users must register for an account • Third-Party APIs: Google, Facebook, Apple 	2
6	<p>As a registered user or party host, I want to login to my profile to access features made available to that account.</p> <ul style="list-style-type: none"> • Business Concepts: Access a registered account and related functionality. • Operations: Login to a registered account, utilize features available to that registered account (e.g., user profile, user cart, user party data, party host balances, etc.) • Business Rules: To access and modify saved user data, users must log into a registered account for the increased functionality 	
7	<p>As a registered user or party host, I want to modify my user profile data to update my information and preferences.</p> <ul style="list-style-type: none"> • Business Concepts: Edit user profile • Operations: Log into user or party host account; edit user profile settings and preferences • Business Rules: Users and party hosts must have a registered account to edit profile information, settings, and preferences. User profiles are private and only the account owner can access and edit their own information 	
8	<p>As a registered user, I want to add or remove parties from my cart to manage my current purchase.</p> <ul style="list-style-type: none"> • Business Concepts: Add or remove party from cart • Operations: Search for party to attend, read party details and host information, add party to cart, remove party from cart • Business Rules: Parties can be in users' carts for a maximum of fifteen minutes before removal from cart to ensure fairness for all users. Parties remain in cart even if users leave the website. Visitors must register for and log into an account to add parties to their cart 	4
9	<p>As a registered user, I want to RSVP to parties so that I can secure my spot to attend.</p> <ul style="list-style-type: none"> • Uses parties attending data collection • Business Concept: RSVP to parties • Operations: Register, login, select party, click button to RSVP • Business Rules: Users must have registered account to RSVP 	3

ID	Requirement	Team
10	<p>As a registered user, I want to check out my cart to pay for my ticket(s), secure my spot as the party, and access my ticket(s)/QR code(s).</p> <ul style="list-style-type: none"> • Business Concepts: Checking out cart, processing payment, receiving confirmation/ticket/QR code • Operations: Searching for party to attend, view party details and host information, edit shopping cart, go through checkout and payment processing system, receive confirmation • Business Rules: All checkouts/orders are final in the last 24 hours prior to the event; no edits or refunds can be made after that buffer limit • Third-Party APIs: Stripe, PayPal APIs 	4
11	<p>As a registered user, I want to write reviews so that I can share my experiences and feedback.</p> <ul style="list-style-type: none"> • Uses reviews data collection • Business Concept: Write reviews • Operations: Register, login, attend party, write review • Business Rules: Users can only review parties they have attended. Reviews should not contain offensive content 	3
12	<p>As a registered user, I want to add or remove party hosts from my favorites to keep track of hosts I like and follow their updates. I would also like a page where I only see events that are being hosted by the people I follow.</p> <ul style="list-style-type: none"> • Business Concepts: Adding and removing party hosts from favorites • Operations: View party host information, edit party host favorites list, receive notifications on party hosts' new party listings • Business Rules: Users must have a registered account to access and edit favorite party hosts list 	1
13	<p>As a registered user, I want to add, delete, or update my reviews to share my feedback and experience with other users and party hosts.</p> <ul style="list-style-type: none"> • Business Concepts: Writing, deleting, and editing reviews on party hosts • Operations: Purchase a party, go to party host information, add/write a review on the party host, delete review, edit review • Business Rules: Only registered users can view, write, delete, and edit reviews on party hosts. Users can only delete or edit their own review. Users can only review a party host that they have bought a party from 	3

ID	Requirement	Team
14	<p>As a registered user or party host, I want to enable or disable notifications so that I can control what kind of messages and alerts I receive from Party Safari.</p> <ul style="list-style-type: none"> • Business Concepts: Notifications to receive updates • Operations: Enable user profile notification settings, purchased parties send notifications about parties starting, add party hosts to receive notifications about new party listings • Business Rules: Users must have a registered account to enable notifications and edit notification preferences. Since SMS notifications have associated costs for us, we will rely on using U.S carrier gateways for SMS emails, sending emails using SendGrid. Users will provide their phone number and associated carrier. Other options are opt-in email notifications to the registered email address on file, or opt-in website notifications. • Third-Party APIs: Web Notifications API, SendGrid API 	4
15	<p>As a party host, I want to create new party listings to advertise and manage my events.</p> <ul style="list-style-type: none"> • Uses party creator data collection • Business Concept: Create party listing • Operations: Register, login, access dashboard, create listing • Business Rules: Only verified party hosts can create party listings 	2
16	<p>As a party host, I want to read my reviews for feedback and to improve service quality.</p> <ul style="list-style-type: none"> • Business Concepts: Viewing reviews • Operations: Registering and verifying an account to receive party host permissions and features, view reviews • Business Rules: Party hosts must verify their account to gain access to view reviews for all their parties 	3
17	<p>As a party host, I want to modify my profile information for correctness.</p> <ul style="list-style-type: none"> • Business Concepts: Edit public party host profile information • Operations: Registering and verifying an account to receive party host permissions and features, edit the host information data collection • Business Rules: Hosts must log in to their verified account to edit their profile information 	2
18	<p>As a party host, I want to view and manage my party attendance list to plan accordingly.</p> <ul style="list-style-type: none"> • Uses attendance list data collection • Business Concept: View attendance, manage attendance • Operations: Register, login, access My Parties dashboard, select party, view attendance, manage attendees • Business Rules: Only the party host who created the party can view and manage the attendance list for that party 	3
19	<p>As a party host, I want to scan and verify attendees' tickets to check them in to the party</p> <ul style="list-style-type: none"> • Business Concepts: View attendance list, scan tickets for validity and attendance • Operations: Registering and verifying an account to receive party host permissions and features, access attendance list data collection, scan party tickets for check-in • Business Rules: Party hosts must verify their account to access the attendance list 	

ID	Requirement	Team
20	<p>As a party host, I want to receive payouts to collect revenue generated from my events.</p> <ul style="list-style-type: none"> • Notifications, attendance list, and party creator data collections • Business Concept: Receive payouts • Operations: Register, login, access My Parties dashboard, select completed party, request payout • Business Rules: Payouts are processed at the end of the month • Third-Party APIs: PayPal, Stripe 	4
21	<p>As a party host, I want to send messages or notifications to the attendees so that I can inform them about any updates or changes.</p> <ul style="list-style-type: none"> • Payment data collection • Business Concept: Receive payouts • Operations: Register, login, access My Parties dashboard, select party, send notifications/messages to attendees. • Business Rules: Only the party host who created the party can send notifications or messages to the attendees. • Third-Party APIs: Push notification, email services (SendGrid) 	
22	<p>As a party host, I want to promote my events on the platform to increase visibility and attendance.</p> <ul style="list-style-type: none"> • Party creator, payment, party listings, and promotions data collection • Business Concepts: Promote event • Operations: Register, login, access My Parties dashboard, promote event. Can allow their parties to be shown over other parties on the map (when there are too many search results to be shown on the map) or allow them to share their party on other social media platforms. • Business Rules: Promotions are a paid feature with fixed predetermined costs 	
23	<p>As a party host, I want to select certain keywords and labels for my party to increase searchability.</p> <ul style="list-style-type: none"> • Party creator, party listings data collections • Business Concepts: View Party, Manage Party • Operations: Register, login, access My Parties dashboard, select party, edit Party Attributes • Business Rules: Only the party host can edit the party and add keywords in the Attributes section 	
24	<p>As a registered user, I want to share parties I am attending on social media so that my friends can see the events I am going to.</p> <ul style="list-style-type: none"> • User profile, parties attending, and party listings data collections • Business Concepts: Advertising events on other platforms • Operations: Register, login, select party, select share to social media platforms • Business Rules: Users must have a registered account for sharing parties. Only confirmed RSVPs may be shared • Third-Party APIs: Twitter/X, Facebook 	3

ID	Requirement	Team
25	<p>As a registered user, I want to search for parties near a location, filter out those results based on criteria I define, and show them as markers on the map.</p> <ul style="list-style-type: none"> • Business Concepts: Searching and filtering • Operations: Visit website, type in search criteria in search bar, click on filter button, and then select how to filter and sort results • Business Rules: Any user can search/filter for parties 	1

Glossary of Business Concepts

Term	Definition
Advertisements	Posts and interactions on extraneous apps or websites such as social media that increase party visibility.
Attendance List	A list of parties that a registered user has RSVP'd to.
Favorites	A list of favorite locations or frats that a registered user can create by clicking the star/heart icon on a party host's page.
Keywords	Selected party attributes from commonly searched labels that accurately describe the party and enhance searchability.
Notifications	A phone notification or email sent to registered users with updates about an upcoming party and/or reminders.
Party Hosts	A registered user who organizes parties. Both "registered users" and "party hosts" must register for the platform using their personal information, but they are distinct groups.
Party Listing	A party that has been created by a party host and has available tickets to sell to registered users.
Payout	The revenue received by the party host from events, processed at the end of the month.
Profile Information	The revenue received by the party host from events, processed at the end of the month.
RSVP	A response to an invitation by purchasing a ticket to the party, marking the intention to attend the party.
Registered Account	An account created by a registered user or created and verified by a party host.
Registered Users	A user that has registered for an account. These users may access adding parties to cart, purchasing tickets for parties, writing reviews for parties they have attended, saving an organization to a list of favorites, in addition to the same operations as unregistered users.
Reviews	A post that a registered user may write about a party after attending it. This post will show up on a section of the party host's public page.
Shopping Cart ("Cart")	A list of parties that a registered user has expressed interest in and is planning to purchase tickets for. Registered users add party listings to their cart by clicking the "add to cart" button on the party listing.
Unregistered Users	A user that has not registered for an account. These users may access the map, party listings and details, and party host information.
User Profile	Includes the profile information of a registered user, including name, contact details, party history, notification preferences, among others, for party hosts.

Team Organization

Subteam	Title	Responsibilities
1	Maps and Events Display	Requirements 1 , 2 , 3 , 4 , 12 , 24 , 25
2	User and Host Profile Management	Requirements 5 , 6 , 7 , 15 , 17
3	Event Management and Review	Requirements 9 , 11 , 13 , 16 , 18 , 19 , 23
4	Payment, Notifications, and Advertisements	Requirements 8 , 10 , 14 , 20 , 21 , 22

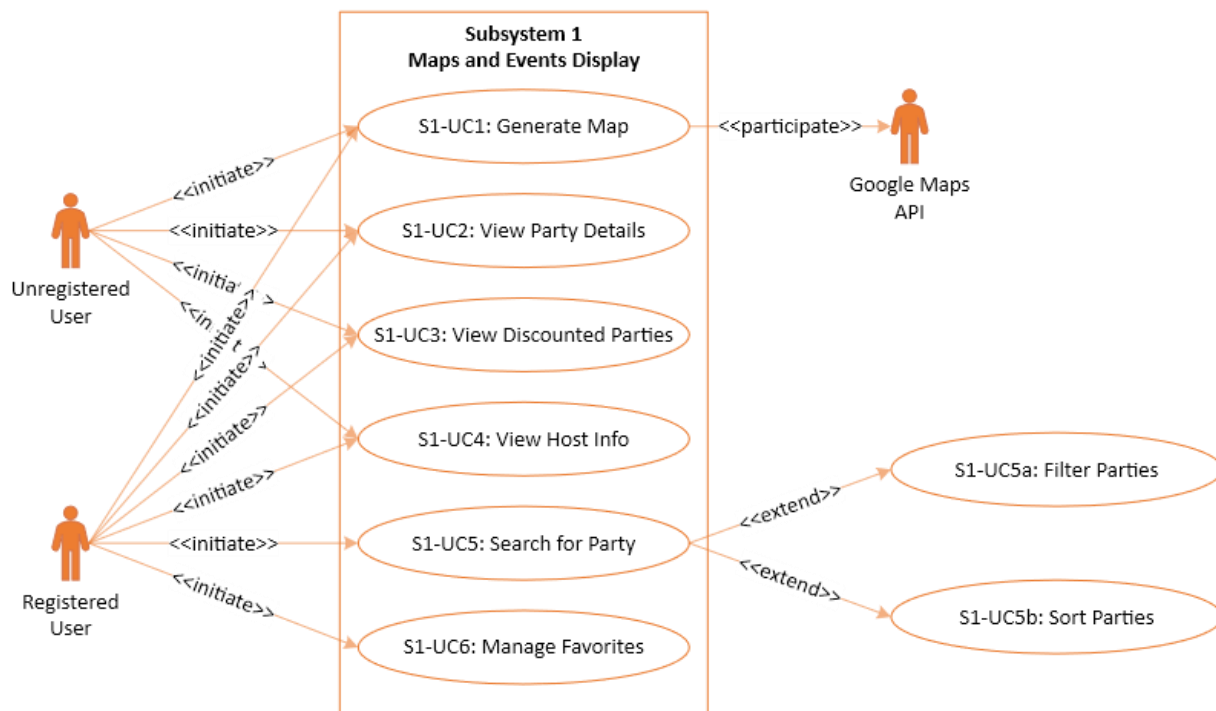
Use Cases

ID	Name	Description	Team
S1-UC1	Generate Map	<p>Description: Generate a map with markers of all party locations for the day, that once clicked will show party details. Markers will be adjusted when the user filters their search or searches for a specific party.</p> <p>Related Requirements: REQ-1, 25</p> <p>Business concepts: View available parties</p> <p>Operations: Visit website</p> <p>Business Rules: Users do not need a registered account to view available parties. They can also search for a specific party, and/or filter results.</p> <p>How the user is notified of errors during use case: If the map cannot be generated or updated (due to connectivity issues), the user will be notified that there is an error displaying the map.</p> <p>Initiating Actor: Unregistered or registered user</p> <p>Actor's Goal: View parties on the map</p> <p>Participating Actors: Google Maps API</p> <p>Preconditions: To display markers on the map, the party host needs to upload party information and post a party listing.</p> <p>Minimal Guarantees: If there are no connectivity issues, and parties exist in the area, a map with party locations marked will be displayed.</p> <p>Success Guarantees: A map with party locations will be displayed. If the user searches for/filters results, only filtered result markers will be displayed.</p> <p>Flow of Events for Main Success Scenario:</p> <ul style="list-style-type: none"> User will open website. A map will display with parties marked at the appropriate location. <p>If the user searches/filters results, only those party markers will be displayed.</p>	1
S1-UC2	View Party Details	<p>Description: After clicking on a marker on the map or searching for a party, a list of party details will be displayed, including address, start time, additional notes provided by the party host, ticket price, and a link to add this party to their cart (if user is registered). Users can also click on the host profile to learn about their background.</p> <p>Related Requirements: REQ-2, 3</p>	1

ID	Name	Description	Team
		<p>Business concepts: View party detail listings, view party host information</p> <p>Operations: Visit website, click on party marker on map, view party details, click on party host to get party host profile</p> <p>Business Rules: Users do not need to have a registered account to view party/party host details. Party hosts must have a registered and verified account to edit their profile information.</p> <p>How the user is made aware of business policies and rules: If the user is registered, they will have access to all the features including buying a ticket and do not need to be made aware of any policies and rules. If they are not registered, a link will be provided to the registration page, along with a message that states they must register to purchase a ticket in the party details.</p> <p>How the user is notified of errors during use case: If the map cannot load or markers cannot be placed, an error message will display saying that the map cannot load currently and may be inaccurate.</p> <p>Initiating Actor: Unregistered or registered user</p> <p>Actor's Goal: Click on a party marker on the map, and view party details. They may also click on the party host from party details to view their profile information.</p> <p>Participating Actors: Party host (to input party information), Google Maps API</p> <p>Preconditions: Party host has already uploaded party information.</p> <p>Minimal Guarantees: The user will be able to click on a party marker on the map and view party details. They will also be able to click on and view the party host profile if they have connectivity.</p> <p>Success Guarantees: The user will be able to click on a party marker on the map and view party details. They will also be able to click on and view the party host profile if they have connectivity.</p> <p>Flow of Events for Main Success Scenario:</p> <ul style="list-style-type: none"> • Users will open the website. • A map with party markers will be displayed. • After the user clicks on a party marker, the party details will be displayed. <p>If they click on the party host, they will be taken to the party host's profile.</p>	
S1-UC3	View Discounted Parties	<p>Description: View discounted parties on the map</p> <p>Related Requirements: REQ-4</p> <p>Business concepts: View discounted parties</p> <p>Operations: Filter party map to only show discounted parties</p> <p>Business Rules: All users can view discounted parties and their original price. Party hosts can set and edit their discounted prices if they are registered and verified.</p> <p>How the user is made aware of business policies and rules: There will be a designated color for a marker whose party is discounted on the</p>	1

ID	Name	Description	Team
		<p>map. When the user clicks on the marker to view party information, the original and discounted price will be displayed.</p> <p>How the user is notified of errors during the use case: If the markers and map cannot load, an error message will be displayed accordingly.</p> <p>Initiating Actor: Unregistered or registered user</p> <p>Actor's Goal: View discounted parties</p> <p>Participating Actors: Party host, Google Maps API</p> <p>Preconditions: Party hosts must update the party information to show the discounted price or mark their party as discounted during party creation.</p> <p>Minimal Guarantees: If the party host does not update the price or the map/markers does not load, discounted parties will not be visible.</p> <p>Success Guarantees: The discounted party is marked on the map with its designated color but with the same marker. If the user clicks on the marker, the discounted and original price will be displayed.</p> <p>Flow of Events for Main Success Scenario:</p> <ul style="list-style-type: none"> • User opens website. • User filters results by discounted parties. <p>Only discounted parties will be shown on the map. They may click on a party to view more information.</p>	
S1-UC6	Manage Favorites	<p>Description: Filter parties that are posted by favorite hosts and allow users to add party hosts to their favorites list.</p> <p>Related Requirements: REQ-17</p> <p>Business concepts: View parties hosted by bookmarked hosts</p> <p>Operations: Filter party map to only show parties by favorited hosts</p> <p>Business Rules: Only registered users are allowed to add party hosts to their favorite list and keep such a list. The registered user will get a notification every time that their favorite party host creates a party posting, and they will be able to easily filter the map based on their favorite host.</p> <p>How the user is made aware of business policies and rules: There will be a designated button/filter option that the user can click on. The user will then be shown the parties hosted by their favorited hosts. To add hosts to their favorite list, users can click a button when visiting a party hosts profile.</p> <p>How the user is notified of errors during the use case: If the party host cannot be added when the user visits their profile, an error message will be shown accordingly, and the user will be notified.</p> <p>Initiating Actor: Registered user</p> <p>Actor's Goal: View parties from hosts on favorite list or add hosts to their favorite list.</p> <p>Participating Actors: Party host, Google Maps API</p> <p>Preconditions: Party host must exist and be valid so users can favorite them.</p>	1

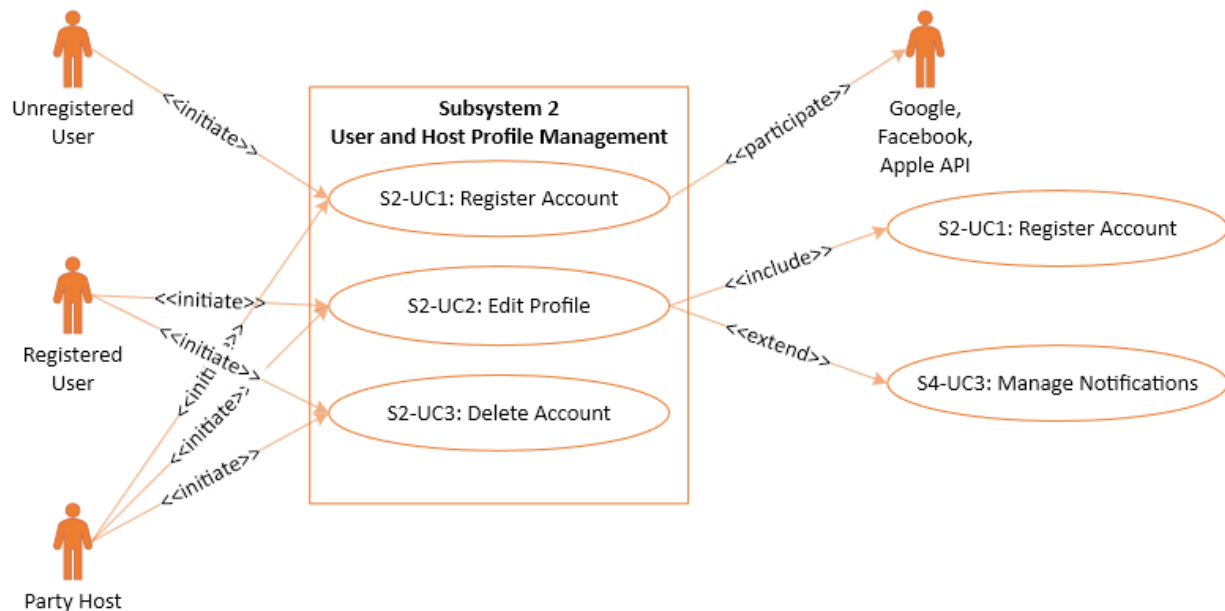
ID	Name	Description	Team
		<p>Minimal Guarantees: If the party host is valid, the user will be able to add that host to their favorite list and receive up to date information about that party host's activities.</p> <p>Success Guarantees: The user will receive a success message when they successfully add a host to their favorite list. They will also be able to filter the map and see all parties posted by their favorite party hosts.</p> <p>Flow of Events for Main Success Scenario:</p> <ul style="list-style-type: none"> • User opens website. • User selects party and then views party host or finds host view search. • Clicks the favorite button. • Goes to map and selects filter by favorite. <p>User should only see parties from their favorite hosts</p>	



ID	Name	Description	Team
S2-UC1	Register Account	<p>Related Requirements: REQ-5</p> <p>Business Concepts: Registering an account.</p> <p>Operations: Create new account</p> <p>Initiating Actor: Unregistered user</p> <p>Actor's Goal: To create an account on Party Safari through our registration system or a participating actor. Users may choose to submit a party host application at this point.</p> <p>Participating Actors: Google Accounts, Facebook, Apple API</p> <p>Preconditions: User must not already have an account.</p>	2

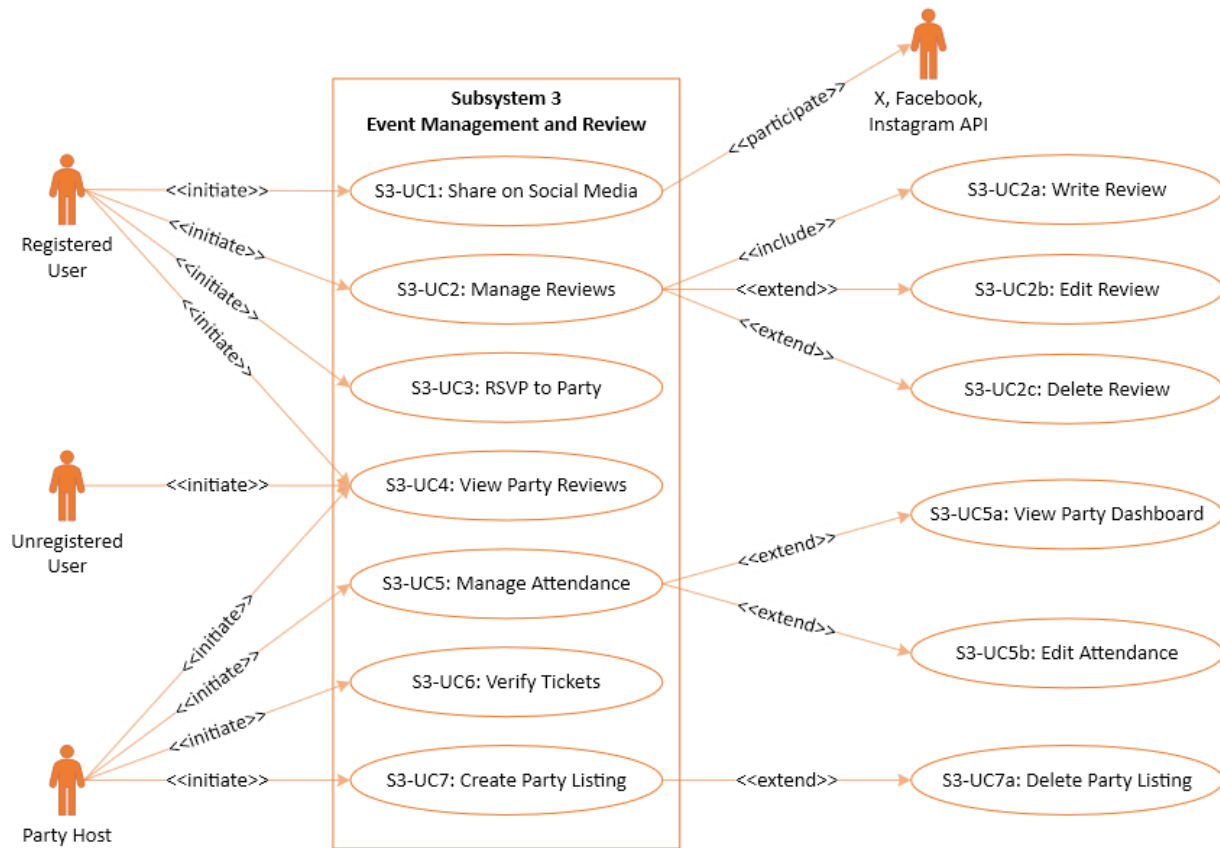
ID	Name	Description	Team
		<p>Minimal Guarantees: If the precondition is not met, no new account will be registered, and a prompt will notify the user that an account already exists.</p> <p>Success Guarantees: The appropriate account will be registered.</p> <p>Flow of Events for Main Success Scenario:</p> <ul style="list-style-type: none"> User has not registered for an account previously. <ul style="list-style-type: none"> Users may register an account. Users may submit applications to become a party host. 	
S2-UC2	Edit Profile	<p>Related Requirements: REQ-6, 7</p> <p>Initiating Actor: Registered user or party host</p> <p>Actor's Goal: To add, update, or remove details from user profile.</p> <p>Participating Actors: None</p> <p>Preconditions: User must have already registered an account (include S2-UC1: Register Account).</p> <p>Minimal Guarantees: If the precondition is not met, the user will not be able to view their "profile" and will be prompted to register or login to an account if profile access is attempted.</p> <p>Success Guarantees: The appropriate profile attributes can be added, altered, or removed. The user will be notified that their profile has been updated successfully.</p> <p>Flow of Events for Main Success Scenario:</p> <ul style="list-style-type: none"> User is registered or party host is verified. <ul style="list-style-type: none"> User/Host may add new profile attributes. User/Host may remove existing profile attributes. User/Host may change profile attributes 	2
S2-UC3	Delete Account	<p>Related Requirements: REQ-7, 8</p> <p>Initiating Actor: Registered user</p> <p>Business Rules: Accounts that have been inactive for more than a year will be automatically deleted from our database.</p> <p>Actor's Goal: To delete their Party Safari account, removing their information (such as name and email) from our databases.</p> <p>Participating Actors: None</p> <p>Preconditions: User must have already registered an account (include S2-UC1: Register Account).</p> <p>Minimal Guarantees: Unregistered users do not have access to a profile settings page, which means they are not able to initiate the account deletion process.</p> <p>Success Guarantees: Any registered user can delete their account. If this happens, the registered user will immediately lose access to their account (and may continue to browse as an unregistered user). The account data will be deleted from our databases thirty days after the date of "deletion."</p> <p>Flow of Events for Main Success Scenario:</p> <ul style="list-style-type: none"> The registered user opens their profile settings and selects "delete account": <ul style="list-style-type: none"> User loses access to account and account is no longer a registered user. 	2

ID	Name	Description	Team
		<ul style="list-style-type: none"> ○ User is notified that account has been deleted and is subsequently redirected to the Party Safari homepage. ○ After 30 days account data is removed from database • The registered account has been inactive for more than a year. <ul style="list-style-type: none"> ○ User loses access to account and account is no longer a registered user. ○ User is notified that account has been deleted due to inactivity. ○ After thirty days, account data is removed from the database. 	



ID	Name	Description	Team
S3-UC1	Share on Social Media	<p>Related Requirements: REQ-22, 24</p> <p>Business Concepts: Advertisements</p> <p>Business Rules: Party host must have created a party listing, and that party has not ended. Registered users must have RSVP'd.</p> <p>How the user is made aware of business rules: If a registered user tries to press "Share" on a party listing and they have not RSVP'd, they will be presented with a message stating "You must RSVP to share!"</p> <p>Initiating Actor: Registered user or party host</p> <p>Actor's Goal: For registered users, to share with their friends what parties they're going to or have attended. For party hosts, to promote their event on other platforms. (X (Twitter)/Facebook/Instagram)</p> <p>Participating Actors: X (Twitter)/Facebook/Instagram</p> <p>Preconditions: The party host must have created a party listing, and that party has not ended. Registered users must have RSVP'd.</p> <p>Minimal Guarantees: If the conditions are not met, then no post has been made to social media.</p> <p>Success Guarantees: The appropriate post has been made to social media.</p>	3

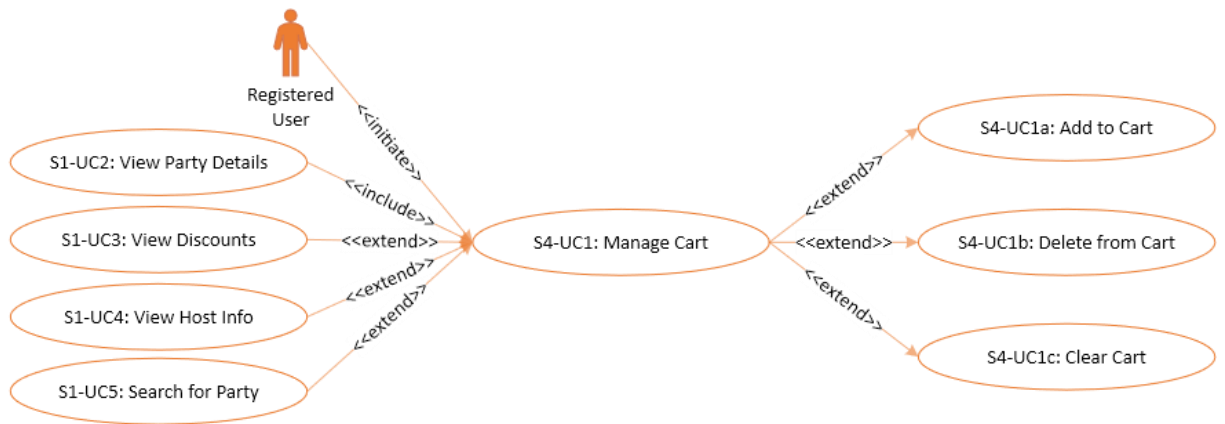
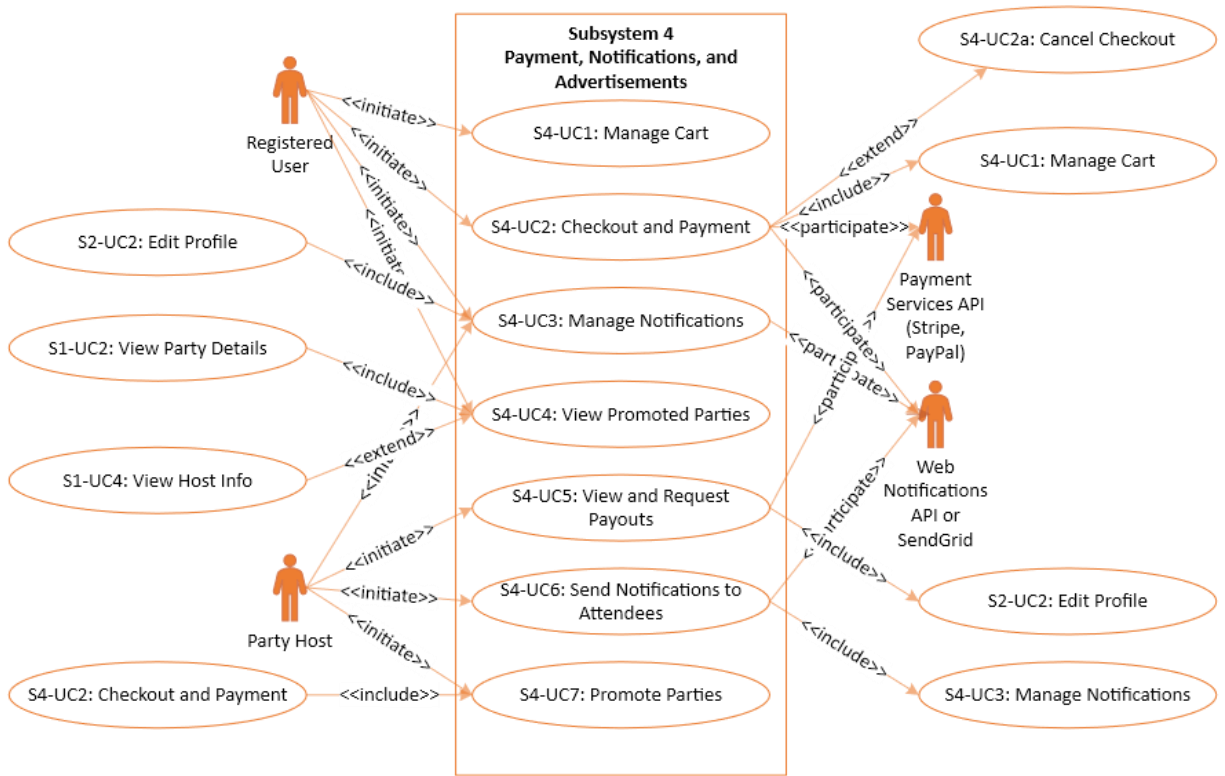
ID	Name	Description	Team
		Flow of Events for Main Success Scenario: <ul style="list-style-type: none"> Both party host and registered user must have registered for an account (Include S2-UC1: Register Account) Party host must have made a party listing (Include S3-UC7: Create Party Listing) <ul style="list-style-type: none"> Party host may now Share on Social Media. Registered user must have RSVP'd for the party (Include S3-UC3: RSVP to Party) <ul style="list-style-type: none"> Registered user may now Share on Social Media. 	
S3-UC2	Manage Reviews	<p>Related Requirements: REQ-11, 13, 19</p> <p>Operations: Writing a review into a text box, editing, or deleting a review and saving changes.</p> <p>Business Concepts: Reviews</p> <p>Business Rules: Users must be registered and must have attended the party they want to write a review for. This review will be publicly viewable to all users. The user can then modify or delete the reviews they have left.</p> <p>Actor's Goal: Offer praise, criticism, or feedback about a party they have attended.</p> <p>Initiating Actor: Registered user</p> <p>Participating Actors: None</p> <p>Preconditions: The registered user must have attended the party. This person is considered an attendee once the party host scans their ticket during the party. If modifying or deleting, the registered user must also be the creator of that review.</p> <p>How the user is made aware of business rules: If the user clicks the 'Write Review' button and the preconditions are not met, they will be presented with a message saying either "You must be a registered user to write a review!" or "You can only write reviews for parties you've attended!". If the user clicks on the vertical ellipsis button and the preconditions are not met, they will not see the option to "edit" or "delete" that review.</p> <p>Minimal Guarantees: If the conditions are not met, then the user cannot post, edit, or delete a review.</p> <p>Success Guarantees: The user can post a publicly viewable review to all users. The user can also edit the content of this publicly viewable review or remove the review entirely for all users.</p> <p>Flow of Events for Main Success Scenario:</p> <ul style="list-style-type: none"> Both party host and registered user must have registered for an account (Include S2-UC1: Register Account) Party host must have made a party listing (Include S3-UC7: Create Party Listing) <ul style="list-style-type: none"> Registered user must have attended the party. The party hosts verify party attendance when they scan the registered user's ticket at the party (Include S3-UC6: Verify Tickets) <ul style="list-style-type: none"> Registered user may now Manage Reviews 	3



ID	Name	Description	Team
S4-UC2	Checkout and Payment	<p>Description: Registered users can check out the parties in their cart and receive a ticket or QR code for entry.</p> <p>Related Requirements: REQ-8, 10</p> <p>Business Concepts: Checking out cart, processing payment, receiving confirmation/ticket/QR code.</p> <p>Operations: Searching for party to attend, view party details and host information, edit shopping cart, go through checkout and payment processing system, receive confirmation.</p> <p>Business Rules: All checkouts are final in the last 24 hours prior to the event; no edits or refunds can be made after that buffer limit. All parties in the cart must be checked out within fifteen minutes before the cart expires and parties need to be added again.</p> <p>How the user is made aware of business policies and rules:</p> <ul style="list-style-type: none"> A refund policy is shown to user before and after checkout. A fifteen-minute timer appears on the website when the first party is added to the cart. <p>How the user is notified of errors during use case: For invalid digital payments, the user will receive a notification of the issue. If Stripe or PayPal is not responding or if the user's credit or debit card payment bounces, the user will be notified and can select a different payment method.</p>	4

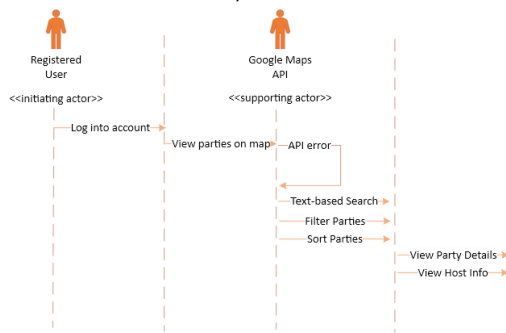
ID	Name	Description	Team
		<p>Initiating Actor: Registered user</p> <p>Actor's Goal: To check out their cart and receive tickets to all chosen parties.</p> <p>Participating Actors: Payment Services (e.g., Stripe, PayPal), Web Notifications API, SendGrid</p> <p>Preconditions: There must be at least one party in the cart and the timer must not be at zero. The user must have a digital method of payment that aligns within the options presented (e.g., PayPal).</p> <p>Minimal Guarantees: If the cart is not checked out within the fifteen-minute window, the cart is emptied.</p> <p>Success Guarantees: After a successful transaction, the user will receive a notification (and an email if enabled) of the successful payment along with any necessary tickets or QR codes.</p> <p>Flow of Events for Main Success Scenario:</p> <ul style="list-style-type: none"> • User will register for an account or log into their existing account. • User will navigate the map or search for parties that fit their criteria. • User will add a chosen party to the cart, creating the new cart • User will enter cart and checkout. • User will choose method of digital payment from the available options. • User will enter any necessary information for payment such as billing address and credit card information • User will receive a notification of a successful transaction when the payment goes through, with a method of entry (tickets/QR codes) attached. 	
S4-UC3	Manage Notifications	<p>Description: Registered users can manage their notifications preferences in their user profile settings</p> <p>Related Requirements: REQ-14</p> <p>Business Concepts: Notifications, user profiles, registered user</p> <p>Operations: Toggle notifications on or off, choose to receive notifications through email and/or text message, enable and disable notifications for specific party hosts.</p> <p>Business Rules: Only the account owner can modify their notification preferences.</p> <p>How the user is made aware of business policies and rules: User will be told that their user profile settings can only be modified by them, which includes their notification preferences.</p> <p>Initiating Actor: Registered user</p> <p>Actor's Goal: Enable or disable notifications, choose how they are going to receive notifications, and pick which party hosts they want notifications from.</p> <p>Participating Actors: Web Notifications API, SendGrid</p> <p>Preconditions: User has a registered account; User has included an email or phone number in their user profile</p>	4

ID	Name	Description	Team
		<p>Minimal Guarantees: If user does not enable notifications, they will remain disabled, and the user will not receive any updates.</p> <p>Success Guarantees: The user will receive notifications regarding parties and party host through their preferred notification method.</p> <p>Flow of Events for Main Success Scenario:</p> <ul style="list-style-type: none"> • User will register for an account or log into their existing account. • User will navigate to their notification preferences under their user profile settings. • User will edit their notifications preferences and save their changes. 	
S4-UC7	Promote Parties	<p>Description: Party hosts can promote/advertise their parties to users</p> <p>Related Requirements: REQ-22</p> <p>Business Concepts: Advertisements, payment processing</p> <p>Operations: Choose what party/parties to advertise, go through payment processing system to buy advertisements</p> <p>Business Rules: Promotions/advertisements are a paid feature with fixed predetermined costs.</p> <p>How the user is made aware of business policies and rules: Party hosts will be shown the price to promote/advertise their party</p> <p>How the user is notified of errors during use case: For invalid digital payments, the user will receive a notification of the issue. If the payment service (e.g., Stripe or PayPal) is not responding, the user will be notified and can select a different payment method. If the user's credit or debit card is not working, they will also be notified and can select a different payment method.</p> <p>Initiating Actor: Party hosts</p> <p>Actor's Goal: Promote their party so more users see their party and purchase a ticket.</p> <p>Participating Actors: Payment services (e.g., Stripe, PayPal)</p> <p>Preconditions: Party host is logged into their account and their party is already listed.</p> <p>Minimal Guarantees: If the party host cancels or decides not to promote their party, their party will not be advertised on the website.</p> <p>Success Guarantees: After successful payment, the party host's party will be promoted on the website so more users see the party.</p> <p>Flow of Events for Main Success Scenario:</p> <ul style="list-style-type: none"> • User creates an account as a party host or logs into their existing account. • Party host creates a new party listing. • Party host selects which party/parties they would like to advertise and goes through payment processing system. • After a successful payment, the party will be promoted on the website 	4

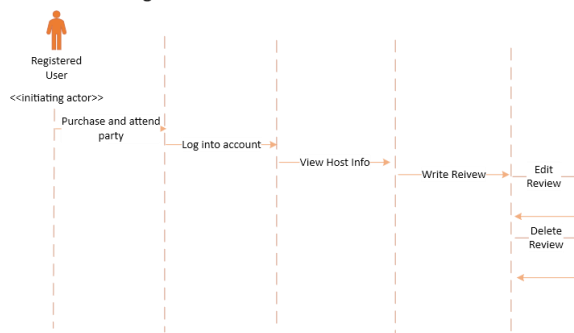


System Sequence Diagrams

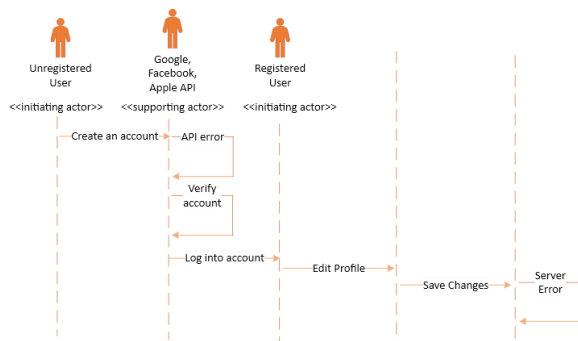
S1-UC5: Search for Party



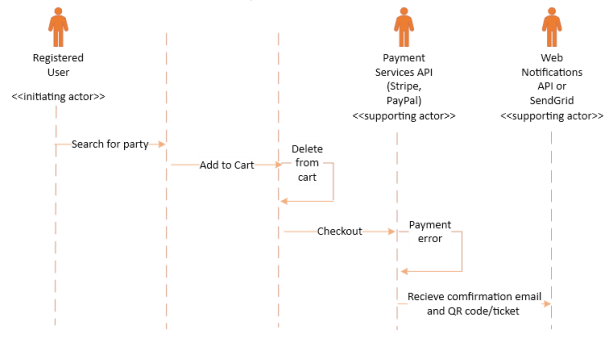
S3-UC2: Manage Reviews



S2-UC2: Edit Profile



S4-UC2: Checkout and Payment



Work Contribution

Subteam	Member	Contribution
1	Peter Chen	Project Description, Business Rules, System Requirements, Use Cases
	Aarushi Aloni	Project Description, Business Rules, Use Cases
	Fabio Gunderson	Requirements, Business concepts, Data Collections, UML
2	Chirag Baviskar	API, Business Rules, Supported Operations, System Requirements, Use Cases, UML
	Adrian Jackson	Use Cases
	Maya Kalaputapu	Project Description, Use Cases
3	Myra Daniels	Project Description, Business Rules, Supported Operations
	Brian Cheng	Supported Operations, System Requirements, Business concepts, Use Cases, UML
	Karim Smires	Project Description, Business Rules, Supported Operations, System Requirements, Use Cases

Subteam	Member	Contribution
4	Sasha Gupta	Data Collections, Business Rules, Use Cases, Glossary
	Sebastian Massella	Project Description, Data Collections, Business Rules, Supported Operations, System Requirements, Use Cases, UML, System Sequence Diagrams
	Minsky Roger	Business Rules