#### **Project Vision:**

We will be making a Planner application that can support event interactions, recognize event proposals, recognize resources, allow booking event times, and disallow two groups from booking to the same resources. The Planner should be able to create/delete events on the Planner, archive events, delete events that have already passed, and edit pre-existing events. We may add or change some features in the future, but this is the baseline we have so far.

#### Requirements

#### **Functional**

- 1. Events should interact with each other
- 2. The planner should support sponsored search results
- 3. The planner should enforce logical scheduling
- 4. The planner should have a user hierarchy
- 5. The planner should support searching
- 6. The planner should be able to share information
- 7. The user can create an account
- 8. The user can view resources
- 9. The user can interact with services
- 10. The user can interact with calendars
- 11. The user can interact with events
- 12. The user can interact with friends
- 13. The user can update settings
- 14. The user can filter search results
- 15. The user can conduct business

#### Non-Functional

- 1. The planner, and its features, will be available in the English language.
- 2. Documentation for the planner will be written in English
- 3. All event dates are posted in the format of the Gregorian calendar
- 4. The planner assumes Central Standard Time
- 5. The planner should have a GUI

Use Cases	Rq 1	Rq 2	Rq 3	Rq 4	Rq 5	Rq 6	Rq 7	Rq 8	Rq 9	Rq 10	Rq 11	Rq 12	Rq 13	Rq 14	Rq 15	Owner
UC Create New User																ВС
UC Login																ВС
UC Manage Events																ВС
UC Manage Friends Access																вк
UC Filter search results																JW
UC Set Notifications																1 M
UC View Profiles																1 M
UC Search Planner																ΥX
UC Set Setting																ΥD
UC Sponsored Search Results																ΥD
UC View Planner																ΥX
UC Manage Services																ВК
UC Manage Booking																ВК
UC Manage Planner																ΥX
UC Payment																ΥD

#### **ID** UC Create New User

#### **Created By Bryce Clark**

**Scope** Travel planner

#### Stakeholders and interests

#### User

- The person/persons who will be traveling on the trip.

#### **Business User**

- Service providers

#### Precondition

User does not have an account

#### **Postcondition**

A User is created

#### Main success scenario

- 1. User selects account type
- 2. User provides Credentials
- 3. User is updated

- a.\* Anytime User exits account creation
- 1. User sent to desktop
- 1a. User selects account type User
- 1. User provides Credentials
- 2. User is updated
- 1b. User selects account type Business User
- 1. Business User provides Credentials
- 2. Business User is updated

#### **ID** UC Login

#### **Created By Bryce Clark**

**Scope** Travel planner

#### Stakeholders and interests

User

- The person/persons who will be traveling on the trip.

#### **Business User**

- Service providers

#### Precondition

- User wants to log in

#### **Postcondition**

User is logged in

#### Main success scenario

- 1. User selects login type
- 2. User provides credentials
- 3. User is logged in

- a.\* anytime User exits login
- 1. User sent back to desktop
- 1a. User selects User login
  - 1. User provides credentials
  - 2. User is logged into Planner
- 1b. User selects Business User login
  - 1. User provides credentials
  - 2. Business User is logged into Business Planner

#### **ID** UC Manage Events

#### **Created By Bryce Clark**

**Scope** Travel planner

#### Stakeholders and interests

User

- The person/persons who will be traveling on the trip.

#### **Business User**

- Service providers

#### **Precondition**

User wants to manage an event

#### **Postcondition**

Event is updated

#### Main success scenario

- 1. User selects manage events
- 2. User picks option
- 3. Option is executed

- a.\* anytime User exits manage event
- 1. Event is restored before User made any edits
- 1a. No Events Exist
- 1. User creates an event
- 2. User input information
- 3. Planner is updated
- 2a. User selects add service
- 1. User inputs information
- 2. Planner is updated
- 2b. User wants to Edit the Event
- 1. User selects event to edit
  - 2. User inputs information
- 3. Planner is updated
  - 2b.2a. Edits result in event conflict
  - 1. User receives warning message
  - 2. Event is restored to before user made any edits

- 2c. User wants to Delete the Event
- 1. User selects event to delete
- 2. User confirms deletion
- 3. planner is updated
- 2d. User wants to Archive the Event
- 1. User select event to archive
- 2. User confirms archive
- 3. Planner is updated
- 2e. Business User wants to Sponsor an Event
- 1. Business User adds sponsorship to event
- 2. Planner is updated

#### **ID** UC Manage Friends Access

#### **Created By**

**Scope** Travel planner

#### Stakeholders and interests

User

- The person/persons who will be traveling on the trip.

#### **Business User**

- Service Providers

#### Precondition

- User wants to manage friends

#### **Postcondition**

Friends are updated

#### Main success scenario

- 1. User selects other user
- 2. Other user given access to user information
- 3. Other user's access to user is changed

- a.\* anytime User exits manage friends
- 1. No more updates are preformed
- 2.a User wishes to restrict access from a user with premission
- 1. Other user's permission to user is removed

#### **ID** UC Filter search results

#### **Created By**

**Scope** Travel planner

#### Stakeholders and interests

User

- The person/persons who will be traveling on the trip.

#### Precondition

User wants to filter search results

#### **Postcondition**

- Search results are updated

#### Main success scenario

- 1. User selects filter search results
- 2. User picks option
- 3. Option is executed

- a.\* anytime user wants to exit
- 1. User sent to desktop
- b.\* anytime user wants to clear filter
- 1. User clears filter
- 2. Filter is cleared
- 2a. Filter by event
- 1. Results are filtered by event
- 2. Users get results
- 2b. Filter by location
- 1. Results are filtered by location
  - 2. Users get results
- 2c. Filter by service
- 1. Results are filtered by service
  - 2. Users get results

#### **ID** UC Set Notifications

#### **Created By**

**Scope** Travel planner

#### Stakeholders and interests

User

- The person/persons who will be traveling on the trip.

#### **Business User**

Service Providers

#### Precondition

Notifications are not set to the User/Business User wants

#### **Postcondition**

Notifications are

#### Main success scenario

- 1. User chooses to set notifications
- 2. User chooses an option
- 3. Notifications are set

- a.\* anytime User no longer wants to set notifications
- 1. Return to Planner
- 2a. User sets event notifications
- 1. Event notifications are set
- 2. Return to planner
- 2b. User sets service notifications
- 1. Service notifications are set
- 2. Return to planner

#### **ID** UC View Profiles

#### **Created By**

**Scope** Travel planner

#### Stakeholders and interests

User

- The person/persons who will be traveling on the trip.

#### Precondition

- User wants to view profiles of another User

#### **Postcondition**

- User views or cannot view other user's profiles

#### Main success scenario

- 1. User wants to view profile
- 2. User selects profile to view
- 3. User views profile

- a.\* anytime user can exit out of view profile
  - 1. the user is no longer presented with the profile
- 2a. Profile could be set to private
  - 1. User will get a warning message

#### **ID** UC Search Planner

#### **Created By Yutai Xue**

**Scope** Travel planner

#### Stakeholders and interests

User

- The person/persons who will be traveling on the trip.

#### **Business User**

- Service Providers

#### Precondition

User want to search for resources in Planner

#### **Postcondition**

User gets result

#### Main success scenario

- 1. User inserts keyword and apply filters to search
- 2. User gets results

- a.\* anytime User stops searching
  - 1. Characters left in the search will not be remembered between instances
- b.\* anytime User wants to clear search
  - 1. User clears search
  - 2. Search is cleared
- 2a. User does not receive any results
- 1. System prompts user to reconsider their search term or filter

#### **ID** UC Set Setting

#### **Created By Yi Ding**

**Scope** Travel planner

#### **Stakeholders and interests**

User

- The person/persons who will be traveling on the trip.

#### **Business User**

Service Providers

#### Precondition

- User wants to set settings

#### **Postcondition**

- Settings are updated

#### Main success scenario

- 1. User wants to set setting
- 2. User updates the settings

- a.\* anytime User wants to exit settings
- 1. User ends action
- 2a. User forgets to save settings and exits
- 1. Settings is reset back before User edited it

#### **ID** UC Sponsored Search Results

#### **Created By Yi Ding**

**Scope** Travel planner

#### Stakeholders and interests

#### **Business User**

Service Providers

#### Precondition

- Business User want to advertise

#### **Postcondition**

- Top search results are sponsored by Business User

#### Main success scenario

- 1. Business Users want to advertise
- 2. Business Users select advertise and inserts budget
- 3. Sponsor ranking is updated

- a.\* anytime Business Users wants to exit advertise
- 1. Business Users ends action
- 2a. Business Users decide to not invest and exits advertise
- 1. Business Users ends action

#### **ID** UC View Planner

#### **Created By Yutai Xue**

**Scope** Travel planner

#### **Stakeholders and interests**

#### User

- The person/persons who will be traveling on the trip.

#### **Business User**

- Service Providers

#### Precondition

- User want to view Planner

#### **Postcondition**

- User view Planner

#### Main success scenario

- 1. User selects Planner to view
- 2. User views Planner

- a.\* anytime User wants to exit select Planner
- 1. User sent back to the desktop
- 2a. User denied from viewing Planner
- 1. User receives a warning message
- 2. User remains on select Planner

#### **ID** UC Manage Services

#### **Created By**

Scope Travel planner

#### Stakeholders and interests

#### **Buisness** owner

- Wants to make profit by advertising services

#### Buisness employee

Wants to advertise services that they provide

#### Precondition

- User with buisness access wants to manage service

#### **Postcondition**

Service is updated

#### Main success scenario

- 1. Business User picks service
- 2. Business edits the service attributes
- 3. Service is edited

- a.\* anytime Business User exits manage service
- 1. Business User ends action
- 2. Service is restored before Business User made any edits
- 1a. The user does not select a service
- 1. New service is created
- 2. Business User inputs information
- 3. Business User ends action and service is updated
- 3a. Business User selects delete service
- 1. Business User selects service to delete
- 2. Business User confirms deletion
- 3. Business User ends action and service is updated

#### **ID** UC Manage Booking

#### Created By Benjamin Kilpatrick

#### **Scope** Travel planner

#### Stakeholders and interests

#### User

- The person/persons who will be traveling on the trip.

#### **Business User**

Service Providers

#### Precondition

User want to manage booking

#### **Postcondition**

Booking has been updated

#### Main success scenario

- 1. User selects booking
- 2. User edits the booking
- 3. Booking is saved

- a.\* anytime User exits manage booking
- 1. User ends action
- 2. Booking is restored before User made any edits
- 1a. User selects creates new booking
- 1. User inputs information
- 2. User ends action and booking is updated
- 3c. User deletes booking
- 1. User confirms deletion
- 2. User ends action and booking is updated

#### **ID** UC Manage Planner

#### **Created By Yutai Xue**

Scope Travel planner

#### Stakeholders and interests

User

- The person/persons who will be traveling on the trip.

#### **Business User**

Service Providers

#### Precondition

- User want to manage planner

#### **Postcondition**

Planner is updated

#### Main success scenario

- 1. User wants to manage a planner
- 2. User picks option
- 3. Option is executed

- a.\* anytime User exits manage planner
- 1. User ends action
- 2. Planner is restored before User made any edits
- 2a. User selects add planner
- 1. User inputs information
- 2. User ends action and planner is updated
- 2b. User selects edit planner
- 1. User selects planner to edit
  - 2. User edits information
  - 3. User ends action and planner is updated
- 2c. User selects delete planner
- 1. User selects planner to delete
- 2. User confirms deletion
- 3. User ends action and planner is updated

#### **ID** UC Payment

#### **Created By Yi Ding**

**Scope** Travel planner

#### **Stakeholders and interests**

User

The person/persons who will be traveling on the trip.

#### **Business User**

- Service Providers

#### Precondition

- Payment is needed

#### **Postcondition**

Payment has been paid

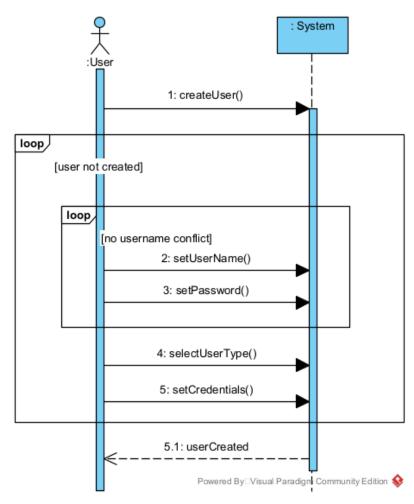
#### Main success scenario

- 1. User selects checkout
- 2. User gives payment information
- 3. User payment is archived

- a.\* anytime User exits payment
- 1. User ends action
- 2a. User cannot afford the total
- 1. User receives a warning message
- 2. User ends action

#### **SSD and Operation Contracts**

**UC Create New User** 



## +createUser() +setUserName() +setPassowrd() +selectUserType() +setCredentials()

Contract: createUser

Operation: begins the create new user process

Cross Reference: user login

Pre-conditions: A user does not have an account.

Post-condition: A user is created.

Contract: setUserName

Operation: sets the username credential of the new user

Cross Reference: user login

Pre-conditions: A new user has no username set. Post-condition: A new user has a username

Contract: setPassword()

Operation: sets the password credential of a new user

Cross Reference: user login

Pre-conditions: A new user does not have a password. Post-condition: A new user password is created.

Contract: selectUserType()

Operation: selects the type of a new user

Cross Reference: user login

Pre-conditions: A new user account does not have a type.

Post-condition: A user password is created.

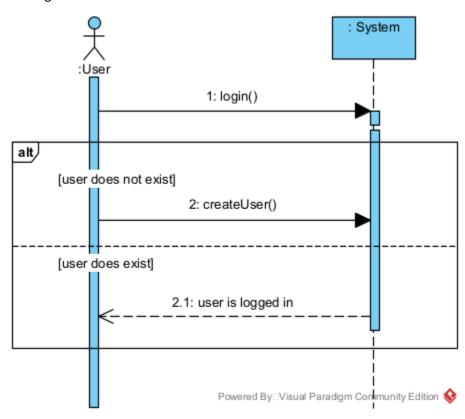
Contract: setCredentials()

Operation: sets the credentials to the values given in the previous functions

Cross Reference: user login

Pre-conditions: A new user account has no credentials Post-condition: A new user's credentials are set

#### **UC** Login



### User Login +login() +createUser()

Contract: Login

Operation: user login Cross Reference: Login

Pre-conditions: User wants to login. Post-condition: User is logged in.

Contract: createUser

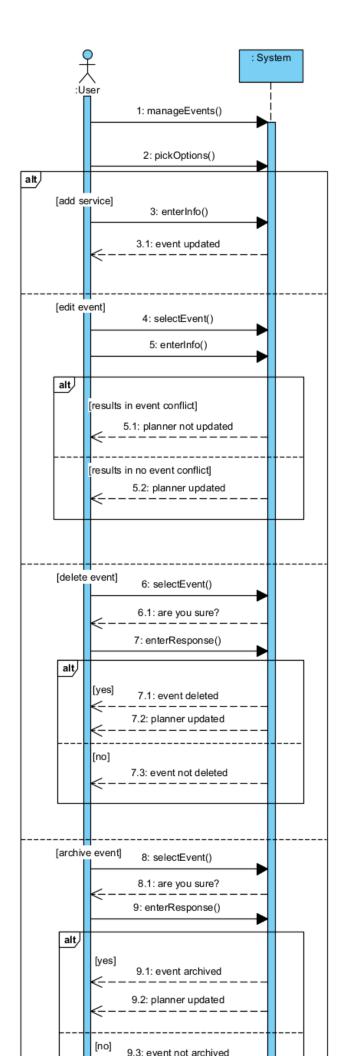
Operation: begins process for new user creation

Cross Reference: Login

Pre-conditions: User wants to login, but has no account

Post-condition: User has an account, may or may not be logged in

**UC Manage Events** 



#### +manageEvents() +pickOptions()

+enterInfo()

+selectEvent()

+enterResponse()

+addSponsorship()

Contract: Manage Events

Operation: begins the manage event process Cross Reference: search, view planner Pre-conditions: User wants to manage event.

Post-condition: Event is updated.

Contract: pickOptions()

Operation: user chooses an event management option

Cross Reference: search, view planner

Pre-conditions: User wants to manage an event. Post-condition: Management method is chosen

Contract: enterInfo()

Operation: user inputs information needed for the type of event managment

Cross Reference: search, view planner Pre-conditions: User selected event type Post-condition: Event information is updated

Contract: selectEvent()

Operation: user chooses an event management option

Cross Reference: search, view planner

Pre-conditions: User wants to manage an event. Post-condition: Management method is chosen

Contract: enterResponse()

Operation: user responds to the confirmation prompt

Cross Reference: search, view planner

Pre-conditions: Event has information to be filled in.

Post-condition: User response is recorded

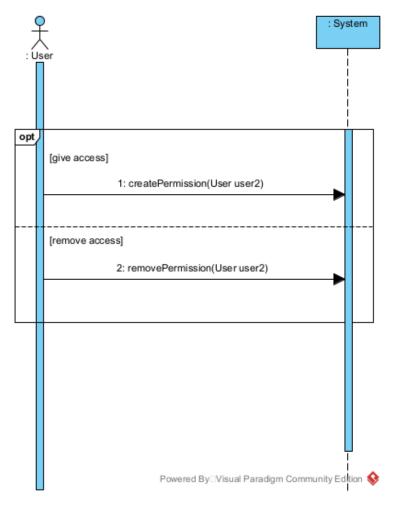
Contract: addSponsorship()

Operation: user adds a sponsorship to an event

Cross Reference: search, view planner

Pre-conditions: User wants to sponsor an event.

Post-condition: Business sponsorship is added to an event



## System +createPermission(User user) +removePermission(User user) Powered By DVisual Paradigm Community Ed

Contract: createPermission

Operation: creates permission for another user to access the active user's information

Cross Reference: Manage Friend Access

Pre-conditions: another user exists without access to the active user

Post-condition: the other user is granted access to the active users location and email.

#### Contract: removePermission

Operation: removes permission for another user to access the active user's information

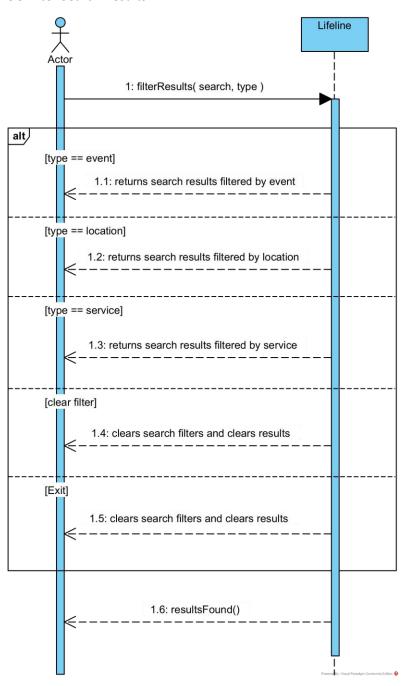
Cross Reference: Manage Friend Access

Pre-conditions: another user exists with access to the active user

Post-condition: the other user's permission to view the active user's location and email is

revocked.

#### **UC Filter Search Results**



## System +filterResults(searching, type) +resultsFound()

Contract: filterResults( searching, type )

Operation: Filters the results matching "searching" to only those that have the type of "type" Cross Reference: Use Case: Filter Search Results

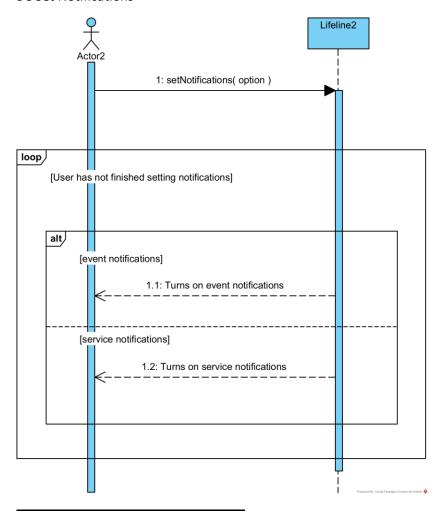
Pre-conditions: User wants to search for a specific result

Post-condition: User receives search results

Contract: resultsFound

Operation: Prints the results returned by filterResults Cross Reference: Use Case: Filter Search Results Pre-conditions: results aren't visible to user Post-condition: results are printed for user to see

#### **UC Set Notifications**



### +setNotifications +setNotification(option)

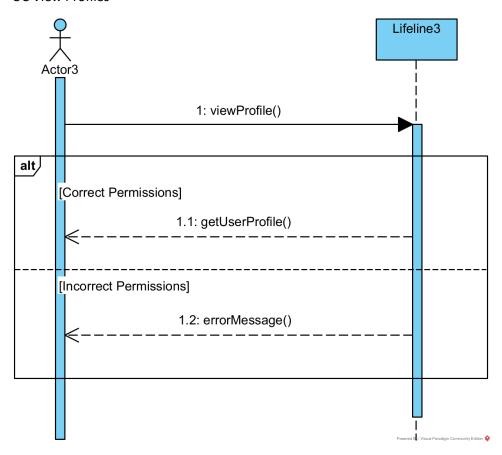
Contract: set Notification (option)

Operation: sets notifications for the planner Cross Reference: Use Case: Set Notifications

Pre-conditions: Notifications aren't properly configured

Post-condition: Notifications are configured

#### **UC View Profiles**



#### ViewProfiles

+viewProfile()

+getUserProfile()

+errorMessage()

Contract: viewProfile( )

Operation: checks if the user is allowed to view the given profile

Cross Reference: Use Case: ViewProfiles

Pre-conditions: User wants to open other users' profiles Post-condition: User's permissions are checked with the s

Contract: getUserProfile( )

Operation: acquires the profile of a user and displays it

Cross Reference: Use Case: ViewProfiles

Pre-conditions: User has correct permissions to view the profile

Post-condition: Profile is displayed

Contract: errorMessage()

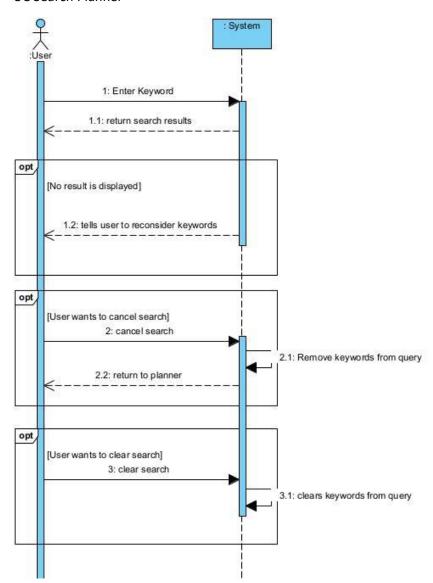
Operation: sends an error message if the User has incorrect

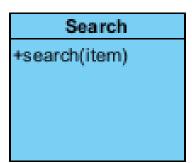
Cross Reference: Use Case: errorMessage()

Pre-conditions: User has incorrect permissions for viewing the profile

Post-condition: Error message is displayed

#### **UC Search Planner**





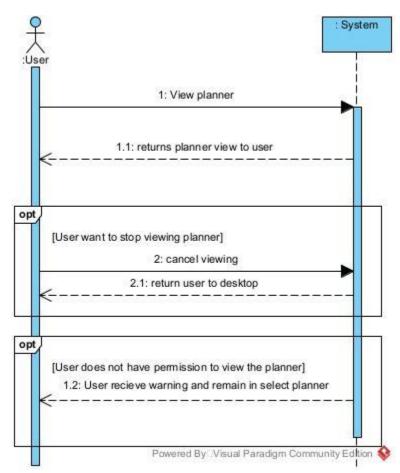
Contract: Search

Operation: searches for an item with a keyword

Cross Reference: Filter Search Result

Pre-conditions: User want to search for resources in Planner

#### **UC View Planner**



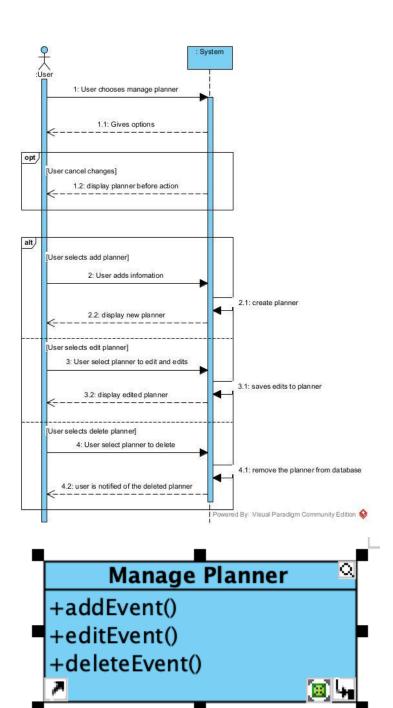


Contract: View Planner

Operation: selects planner to display Cross Reference: manage planner

Pre-conditions: User want to view other planners

Post-condition: User views other planners



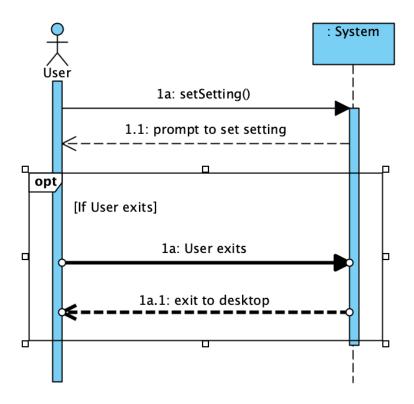
Contract: Manage Planner

Operation: Allows for add, delete, or edit events from a planner

Cross Reference: Manage booking

Pre-conditions: User want to manage a planner Post-condition: Planner selected has been updated

**UC Set Settings** 

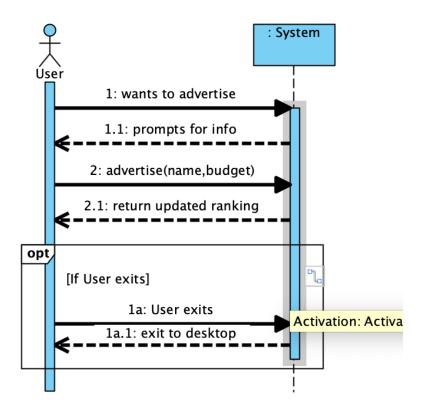


+setSetting()

Contract: Set Setting

Operation: Allows User to set setting Cross Reference: Filter search results Pre-conditions: User wants to set settings Post-condition: Settings are updated

**UC Sponsored Search Results** 



### Sponsored Search +advertise(name, budget)

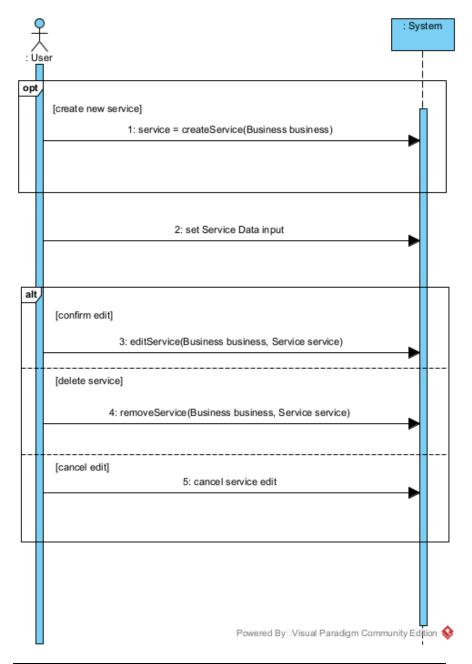
Contract: Sponsored Search Results

Operation: Search results are padded with sponsors

Cross Reference: Filer search results

Pre-conditions: Business User wants to advertise

Post-condition: Rankings is updated



#### System

- +createService(Business business)
- +editService(Business business, Service service)
- +removerService(Business business, Service service)

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Contract: createService

Operation: creates a service that is sold by a buisness and booked by users for their events

Cross Reference: Manage Service

Pre-conditions: the user wants to create a service associated with a business to which they

have access.

Post-condition: a new service is associated with a buisness

#### Contract: editService

Operation: edits a service that is sold by a buisness and booked by users for their events

Cross Reference: Manage Service

Pre-conditions: the user wants to edit a service associated with a business to which they have

access.

Post-condition: a pre-existing service is edited

#### Contract: removeService

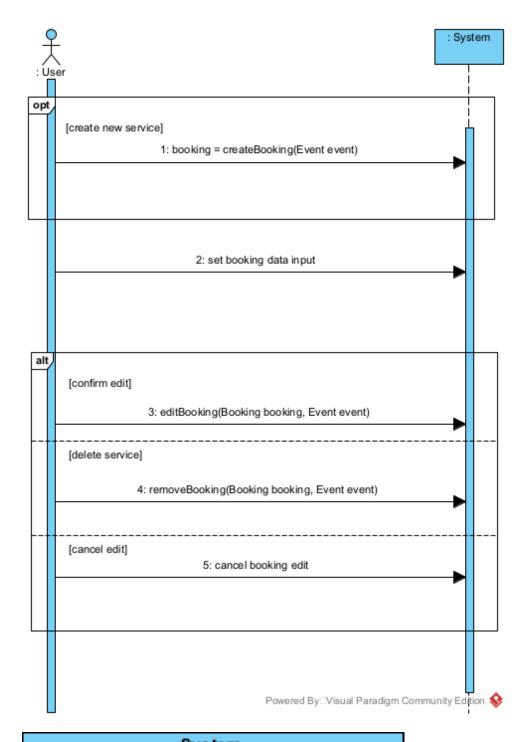
Operation: removes a service that is sold by a buisness and booked by users for their events Cross Reference: Manage Service

Pre-conditions: the user wants to remove a pre-existing service associated with a business to

which they have access.

Post-condition: a pre-existing service is removed from those offerd by a business

**UC Manage Booking** 



# +createBooking(Event event) +editBooking(Booking booking, Event event) +removeBooking(Booking booking, Event event) Powered By:: Visual Paradigm Community Edition

Contract: createBooking

Operation: creates a booking Cross Reference: Manage Booking

Pre-conditions: User wants to make a new booking

Post-condition: booking is created with some business offering some service

Contract: editBooking

Operation: edits a booking

Cross Reference: Manage Booking

Pre-conditions: User wants to edit a pre existing booking

Post-condition: booking is changed buisness is notified of change

Contract: removeBooking

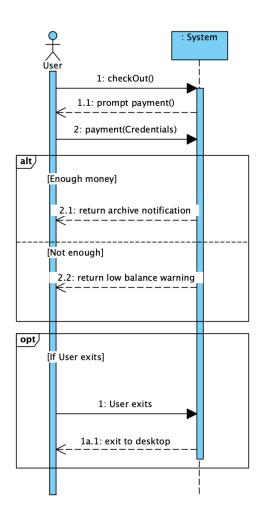
Operation: remove a booking Cross Reference: Manage Booking

Pre-conditions: User wants to make a new booking

Post-condition: booking is created

#### **UC Payment**

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#### Payment

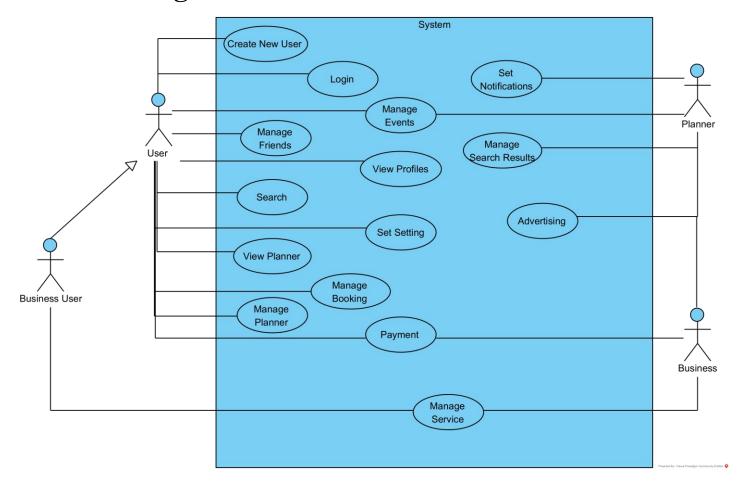
+checkOut() +payment(Credentials)

Contract: Payment

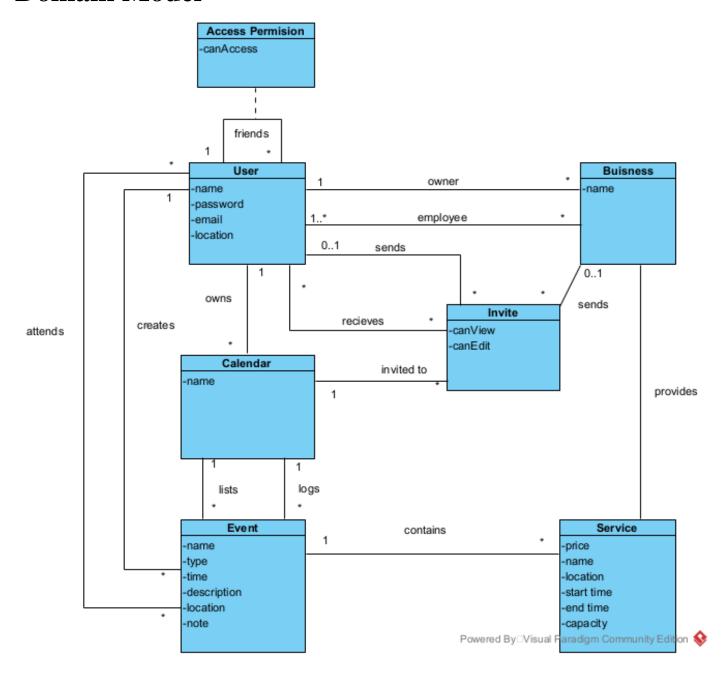
Operation: Allows User to pay total Cross Reference: Manage service Pre-conditions: User wants to pay total

Post-condition: Total is paid

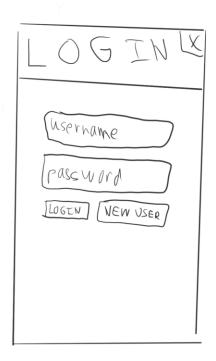
#### **Use Case Diagram**

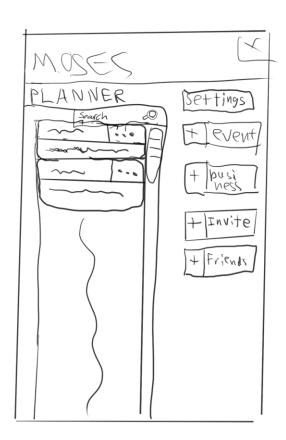


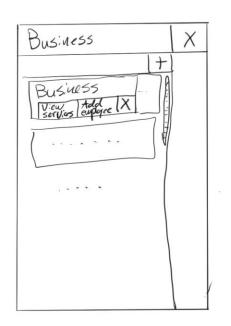
#### **Domain Model**

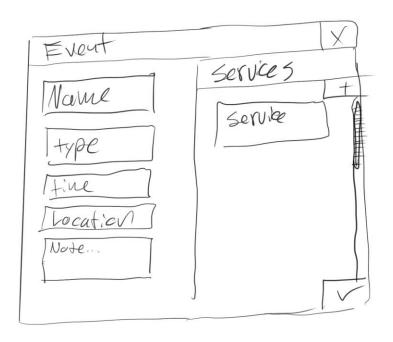


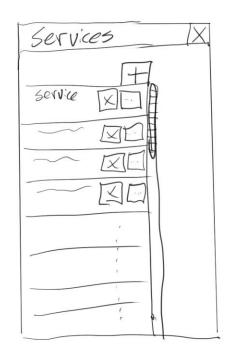
#### **Wire Frame**

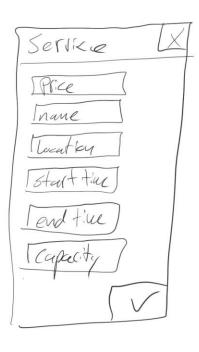












#### **Gantt Diagram**

#### **Untitled Gantt Project**

Aug 22, 2022

http://

Project manager

**Project dates** Aug 22, 2022 - Dec 30, 2022

Completion0%Tasks28Resources4

#### **Tasks**

Name	Begin date	End date
presentation and reporting	12/29/22	12/29/22

#### Tasks

Name	Begin date	End date
Analysis	8/22/22	10/18/22
project vision	8/22/22	8/25/22
team assembly	8/26/22	8/31/22
infrastructure initialization	9/1/22	9/6/22
requirements analysis	9/7/22	9/9/22
use cases	9/12/22	9/14/22
traceability matrix	9/15/22	9/19/22
system sequence diagrams	9/20/22	9/26/22
system operations	9/27/22	9/30/22
wireframes	10/3/22	10/5/22
domain model	10/6/22	10/11/22
presentation and reporting	10/12/22	10/18/22
Design	10/27/22	12/6/22
design model	10/27/22	11/1/22
sequence diagrams	11/2/22	11/7/22
package diagrams	11/8/22	11/10/22
GRAPS patterns	11/11/22	11/15/22
test coverage	11/16/22	11/21/22
prototyping	11/22/22	11/29/22
presentation and reporting	11/30/22	12/6/22
Implementation	12/7/22	12/29/22
backend	12/7/22	12/9/22
user interface	12/12/22	12/15/22
user input validation	12/16/22	12/20/22
Import/export	12/21/22	12/22/22
unit-testing	12/23/22	12/26/22
documentation	12/27/22	12/28/22

3

#### Resources

 Name
 Default role

 Analyst
 Analyst

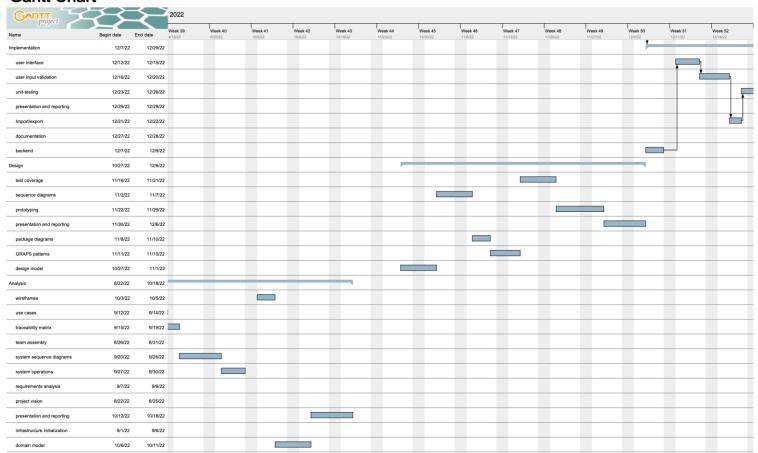
 Developer
 Developer

 Tester
 Tester

 Team Lead
 Team Lead

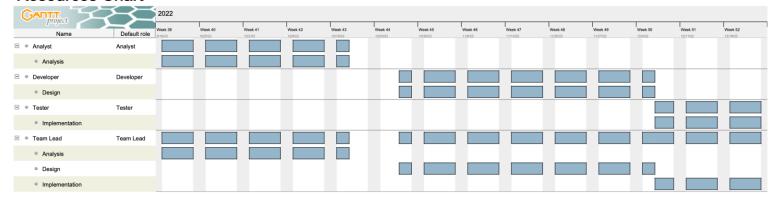
**Gantt Chart** 

5



#### **Resources Chart**

6



#### **Timecard**

#### **GitHub**

Benjamin: 22 hours - Domain Diagram

- SSD

- Fully Dressed Use Case

Wire frameGlossaryGroup Avatar

Bryce: 7 hours - Requirements

- Use Case

- SSD

- Fully Dressed Use Case

Jason: 23 hours

System OperationsTraceability matrix

- Fully Dressed Use Case

RequirementsWire frameProject Planning

- Project Time Management

- SSD

- Fully Dressed Use Case

- Trello

- Project vision

- Use Case Diagram

Yutai: 9 hours

- Gantt Diagram

- Use Case

- SSD

- Fully Dressed Use Case

Yi: 21 hours

- Website

- PPT

- Use Case

- SSD

- Fully Dressed Use Case

- Trello