

Bicep Buddy

Iteration 1

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Project Vision:

Going to the gym alone is a bummer.

But the gym doesn't have to be a scary place when you go with a buddy.

The goal of our software is to improve your workout experience by pairing you with the best Bicep Buddy possible.

Go get those gains!

Website: <https://bobrein.github.io/bicepbuddysite/>

Requirements:

Functional:

1. User can create an account
2. User can log in to their account
3. User can set details and preferences at account creation
4. User can manage details and preferences through their account
5. User can accept and decline Bicep Buddy matches

Non-Functional:

1. Efficient algorithm that matches users based on preferences
2. Passwords will be encrypted
3. Accounts will have to be email-verified

Actors:

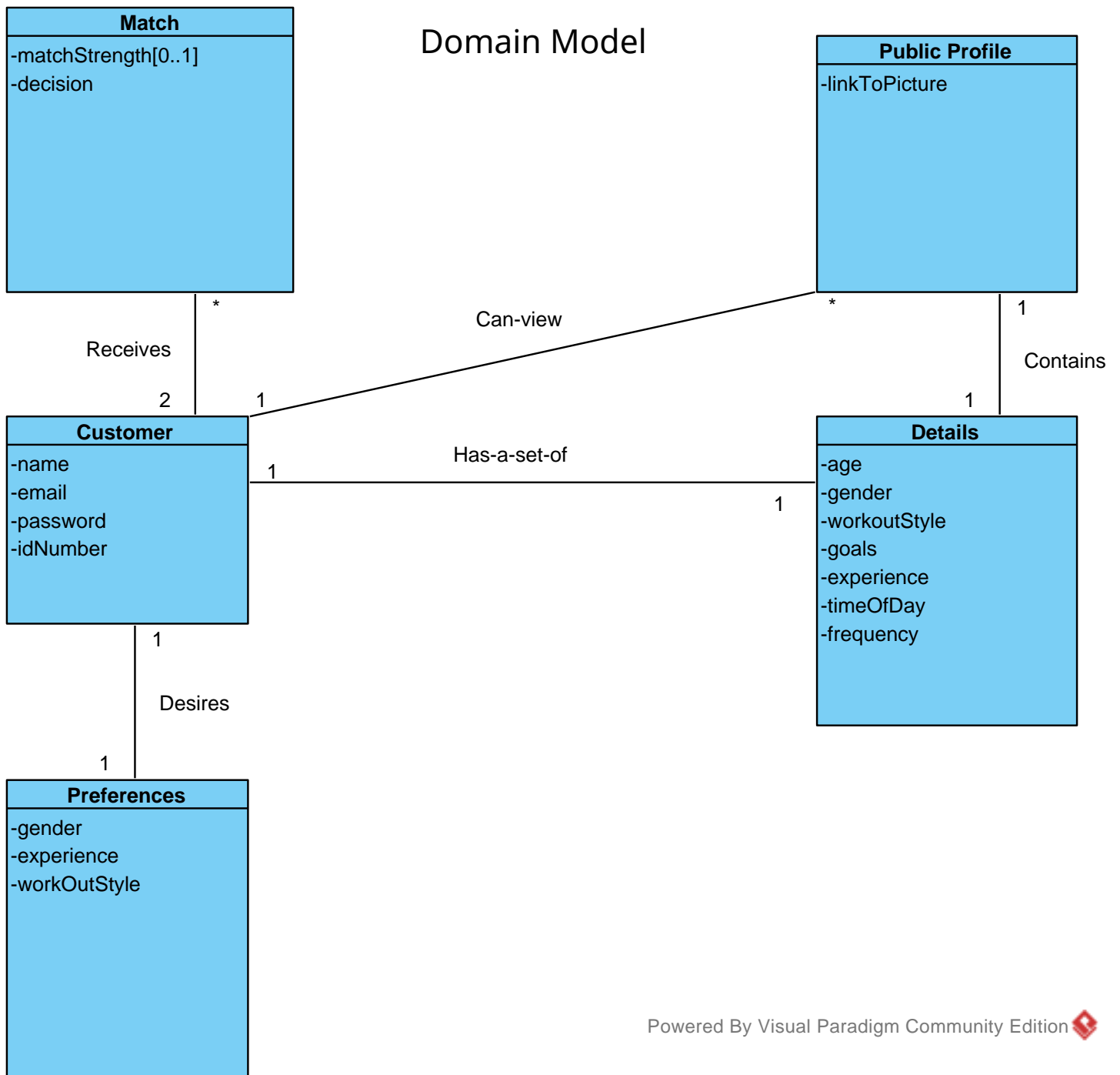
Primary Actors:

1. Consumer
2. Admin

Supporting Actors:

1. Algorithm
2. API

Domain Model



Use Cases:

(Zac)ID: UC 1: User creates account

Scope: User Database

Level: User Goal

Primary Actor: User

Stakeholders and interests:

User:

- Wants easy access to Bicep Buddy application.
- Interested in being matched with a gym partner

Company:

- Wants record of users in the system for data analytics and in order to match them with other users.

Precondition: User has access to Bicep Buddy application.

Postcondition: User has an account in the Bicep Buddy user database.

Main Success Scenario:

1. User wants to make an account in the Bicep Buddy system.
2. User opens the Bicep Buddy application.
3. User presses 'create account' button.
4. User enters e-mail and desired password.
5. User gains access as a user of Bicep Buddy.

Extensions:

*a. If Bicep Buddy application is unresponsive at any time, close and reopen the application.

4a. If the email is already used in the database, deny creation of account with that email.

4b. User must either log in or create an account with a different email.

(Zac)ID: UC 2: User logs in to Bicep Buddy application

Scope: User Database

Level: User Goal

Primary Actor: User

Stakeholders and Interests:

User:

- Would like to use Bicep Buddy application to find a gym buddy.

Company:

- Wants to retain users and allow them to use the application repeatedly.

Preconditions: User has a Bicep Buddy account in the system already

Postconditions: User will gain access to the application in their account.

Main Success Scenario:

1. User wants to log in to their account.
2. User opens Bicep Buddy application
3. User presses 'log in' button
4. User enters their email and password
5. User gains entry into their account in the application.

Extensions:

*a: If the application is unresponsive at any time, close and reopen Bicep Buddy.

4a. If user enters an incorrect email or password, deny entry into the account.

4b. Allow user to send password reset to their email.

(Zac)ID: UC 3: User verifies Bicep Buddy account

Scope: User Database

Level: User Goal

Primary Actor: User

Stakeholders and Interests:

User:

- Would like to use Bicep Buddy application to find a gym buddy.

Company:

- Wants to verify that accounts are not bots
- Wants to assure that the user database doesn't become bloated with fake or bot accounts.

Preconditions: User has a Bicep Buddy account in the system already and is logged in.

Postconditions: User will gain access to the full scope of Bicep Buddy features.

Main Success Scenario:

1. User wants full access to their Bicep Buddy account and features.
2. User enters main Bicep Buddy application screen.
3. User is prompted to verify their account.
4. User accepts verification request
5. Verification email is sent to the user's email address.
6. User follows email link to verify account.
7. User's account is now considered verified in the user database.

Extensions:

*a: If the application is unresponsive at any time, close and reopen Bicep Buddy.

3a. If the user ignores or declines the verification request, they are denied access to the main page of Bicep Buddy until they verify their account.

6a. If the verification link is dead or broken, user can reopen Bicep Buddy and start back at (2).

(Reece)ID: UC 4: User agrees to be matched

Scope: Match Database

Level: User Goal

Primary Actor: User

Stakeholders and Interests:

User:

- Wants to interact with user matched

Company:

- Record matched users
- Allow for user matched to accept invitation or decline
- Allow for users to interact with each other through the matching system

Preconditions: Users have been matched.

Postconditions: User matched can accept or decline the primary users invitation. Users can contact each other.

Main Success Scenario:

1. User wants to become matched with another user
2. User accepts match to other user
3. Other user is able to accept or reject the invitation

Extensions:

*a: If the application is unresponsive at any time, close and reopen Bicep Buddy.

1a. User will not be matched with another user more than once.

(Reece)ID: UC 5: User views potential match profiles

Scope: User Interface

Level: User Goal

Primary Actor: User

Stakeholders and Interests:

User:

- Wants to view other users profile
- Wants to decide whether or not to match this user

Company:

- Provide other users profile
- Provide the ability to match this user

Preconditions: Users have been matched.

Postconditions: User has viewed the other user's profile and can decide whether to match or not.

Main Success Scenario:

1. User gets matched with a user
2. User can view the other users profile
3. User can decide whether to match the other user or not

Extensions:

*a: If the application is unresponsive at any time, close and reopen Bicep Buddy.

1a. User will not be matched with another user more than once.

2a. User can leave the other users profile by returning to their profile.

3a. User does not have to accept or reject the match and can possibly be rematched.

(Reece)ID: UC 6: User accepts / rejects a match

Scope: Match Database

Level: User Goal

Primary Actor: User

Stakeholders and Interests:

User:

- Wants to be able to accept or decline an invitation
- Wants to be able to interact with the user that sent the invitation

Company:

- Record and utilize the accepted invitation
- Allow for matched and accepted users to be able to interact and communicate
- Restrict declined invitations from appearing in future matches

Preconditions: Users have been matched and one has sent an invitation to the other.

Postconditions: The users will either be matched allowing for communication or declined thus not allowing for these users to be matched again.

Main Success Scenario:

1. Matched user will send an invitation to the other user.
2. Other user will either accept or decline this invite.
3. If the user accepts the invite then they will be allowed to communicate.
4. If the user declines the invitation then they will no longer be matched by the algorithm.

Extensions:

*a: If the application is unresponsive at any time, close and reopen Bicep Buddy.

1a. If the user does not respond to the request for an extended time then it will be discarded.

2a. The user does not have to accept or decline the invitation but can navigate back to their profile page.

(Chase)ID: UC 7: User sets required data after account creation

Scope: User Database

Level: User Goal

Primary Actor: User

Stakeholders and interests:

User:

- Wants accurate information stored about them
- Wants basic information like age and gender used when matching

Company:

- Wants to record data for data analytics of users.
- Wants to more effectively match users.

Precondition: User has an account with Bicep Buddy and is logged in.

Postcondition: User has basic account data set.

Main Success Scenario:

1. User is prompted to enter basic account data after first log-in.
2. User fills in fields for age and full name.
3. User enters drop-down for gender.
4. User saves these details.
5. User exits the 'enter details' portion of the application.

Extensions:

*a. If Bicep Buddy application is unresponsive at any time, close and reopen the application.

2a. If user fills age field with unrealistic data or non-viable characters, user will be prompted to enter a correct age.

4a. If user attempts to save with non-viable data in any field, they will be prompted to fill out with viable data before they can save.

(Chase)ID: UC 8: User sets account details to be used for matching

Scope: Match Database

Level: User Goal

Primary Actor: User

Stakeholders and interests:

User:

- Wants to include relevant details about themselves to be accurately matched.

Company:

- Wants to record data for data analytics of users.
- Wants to more effectively match users.

Precondition: User has an account with Bicep Buddy and is logged in.

Postcondition: User has work-out details set.

Main Success Scenario:

1. User opens portion of application used to set user details.
2. User indicates that they would like to edit their details.
3. User fills in drop-downs for work-out style, time of day, goals, etc.
4. User saves the data they have entered.
5. User exits details view.

Extensions:

*a. If Bicep Buddy application is unresponsive at any time, close and reopen the application.

4a. If user quits without saving, they will have to start from step 1.

(Chase)ID: UC 9: User sets preferences for those they match with

Scope: Match Database

Level: User Goal

Primary Actor: User

Stakeholders and interests:

User:

- Wants to be matched with people who fit their desired preferences.
- Wants to be able to work out with a gym partner that suits them.

Company:

- Wants to apply accurate matching between users.

Precondition: User has an account with Bicep Buddy and is logged in.

Postcondition: User has match preferences set.

Main Success Scenario:

1. User opens view for setting matching preferences.
2. User indicates that they would like to modify their preferences.
3. User fills in preferences such as age, work-out style, goals, etc.
4. User saves their preferences.
5. User exits the preferences view.

Extensions:

*a. If Bicep Buddy application is unresponsive at any time, close and reopen the application.

4a. If user quits without saving, they will have to start from step 1.

(Hunter)ID: UC 10: User browses / filters matches

Scope: User Database

Level: User Goal

Primary Actor: User

Stakeholders and interests:

User:

- Wants to adjust preferences to filter matches by certain options
- Wants to prioritize certain preferences above others

Company:

- Intends to provide users the ability to more accurately find matches.

Precondition: User has access to Bicep Buddy application and has filled out details.

Postcondition: User is presented with a match list reflecting filter options.

Main Success Scenario:

1. User intends to prioritize certain matching preferences.
2. User opens the Bicep Buddy application.
3. User logs into account.
4. User opens matched users list.
5. User opens filter options.
6. User adjusts filter to their needs.
7. User applies filter and is presented with a different list reflecting matches defined in filter.

Extensions:

*a. If Bicep Buddy application is unresponsive at any time, close and reopen the application.

3a. If login fails, prompt them to create an account or try again.

4a. If user has not filled out additional details, ask them to fill them out.

4b. User is presented with details that can be filtered by.

(Hunter)ID: UC 11: User opens a new Direct Messaging (D.M.) instance

Scope: User DM

Level: User Goal

Primary Actor: User

Stakeholders and interests:

User:

- Needs to communicate with matches

Company:

- Wants to facilitate the user matching processes

Precondition: User has access to Bicep Buddy application and has filled out details.

Postcondition: User is presented with a D.M. instance between them and the intended user.

Main Success Scenario:

1. User opens the Bicep Buddy application.
2. User logs into the application.
3. User views their accepted matches list.
4. User opens a new D.M. instance with the intended match.

Extensions:

*a. If Bicep Buddy application is unresponsive at any time, close and reopen the application.

2a. If login fails, prompt them to create an account or try again.

3a. If user's accepted matches list is empty, prompt them to browse potential matches.

3b. If user has matches, present them and allow them to search accepted matches by username.

(Hunter)ID: UC 12: User communicates with match via D.M. instance

Scope: User DM

Level: User Goal

Primary Actor: User

Stakeholders and interests:

User:

- Needs to communicate with matches

Company:

- Wants to facilitate the user matching processes

Precondition: User has access to Bicep Buddy application and has filled out details.

Postcondition: User is able to efficiently communicate with the intended matched user.

Main Success Scenario:

1. User opens the Bicep Buddy application.
2. User logs into the application.
3. User opens a new D.M. instance with the intended match.
4. User enters a new message into the D.M. instance.
5. User sends message to the other user.

Extensions:

*a. If Bicep Buddy application is unresponsive at any time, close and reopen the application.

2a. If login fails, prompt them to create an account or try again.

5a. If the recipient is currently offline, mark the sent messages as pending for later notification.

5b. If D.M. preference for timestamp visibility is on, show time sent timestamp.

(Bob)ID: UC 13: User deletes account

Scope: User Database

Level: User Goal

Primary Actor: User

Stakeholders and interests:

User:

- Wants to no longer be associated Bicep Buddy application.
- Wants to remove their personal information from the application.

Company:

- Wants to make sure that the user's account is removed so that other users are no longer matched with them.
- Wants to respect the privacy of their users to maintain good standing among the public even with users who are no longer using their product

Precondition: User has an account on the Bicep Buddy system.

Postcondition: User no longer has an account in the Bicep Buddy user database.

Main Success Scenario:

1. User wants to delete an account in the Bicep Buddy system.
2. User opens the Bicep Buddy application.
3. User logs into Bicep Buddy
4. User navigates to account settings
5. User presses 'delete account' button.
6. User confirms that they would like to delete their account.
7. User answers multiple choice question regarding why they are leaving Bicep Buddy
8. User's account is deleted in the user database.
9. User's pending match requests are denied.
10. User's 'buddies' are notified via email and the user is removed from their matches list

Extensions:

- *a. If Bicep Buddy application is unresponsive at any time, close and reopen the application.
- 3a. If the user cannot log in they can click 'I forgot my password' to get into the application.

(Bob)ID: UC 14: User searches for another user by username

Scope: User Database

Level: User Goal

Primary Actor: User

Stakeholders and interests:

User:

- Wants to find a particular user's profile by searching Bicep Buddy for their username.

Company:

- Wants to ensure that users can connect with as many other users as possible including finding someone by username.

Precondition: User has an account on the Bicep Buddy system and they are searching for a valid Bicep Buddy username.

Postcondition: User is viewing the profile of the other user whom they were searching for.

Main Success Scenario:

1. User wants to find another account in the Bicep Buddy system.
2. User opens the Bicep Buddy application.
3. User logs into Bicep Buddy
4. User searches in the search bar for the username
5. User views the other user's profile that they were searching for.

Extensions:

- *a. If Bicep Buddy application is unresponsive at any time, close and reopen the application.
- 3a. If the user cannot log in they can click 'I forgot my password' to get into the application.
- 4a. If the application responds "no user with that username" then retype the username and confirm that it is accurate (case sensitive).

(Bob)ID: UC 15: Administrator removes dead or unverified accounts

Scope: User Database

Level: Administrator Goal

Primary Actor: Administrator

Stakeholders and interests:

User:

- Wants to avoid being matched with a user that is not actually an active live account

Company:

- Wants to ensure that the database only contains valid accounts

Precondition: An account on Bicep Buddy has been inactive for too long or passed the time limit on the email verification.

Postcondition: That account has been removed from the Bicep Buddy application.

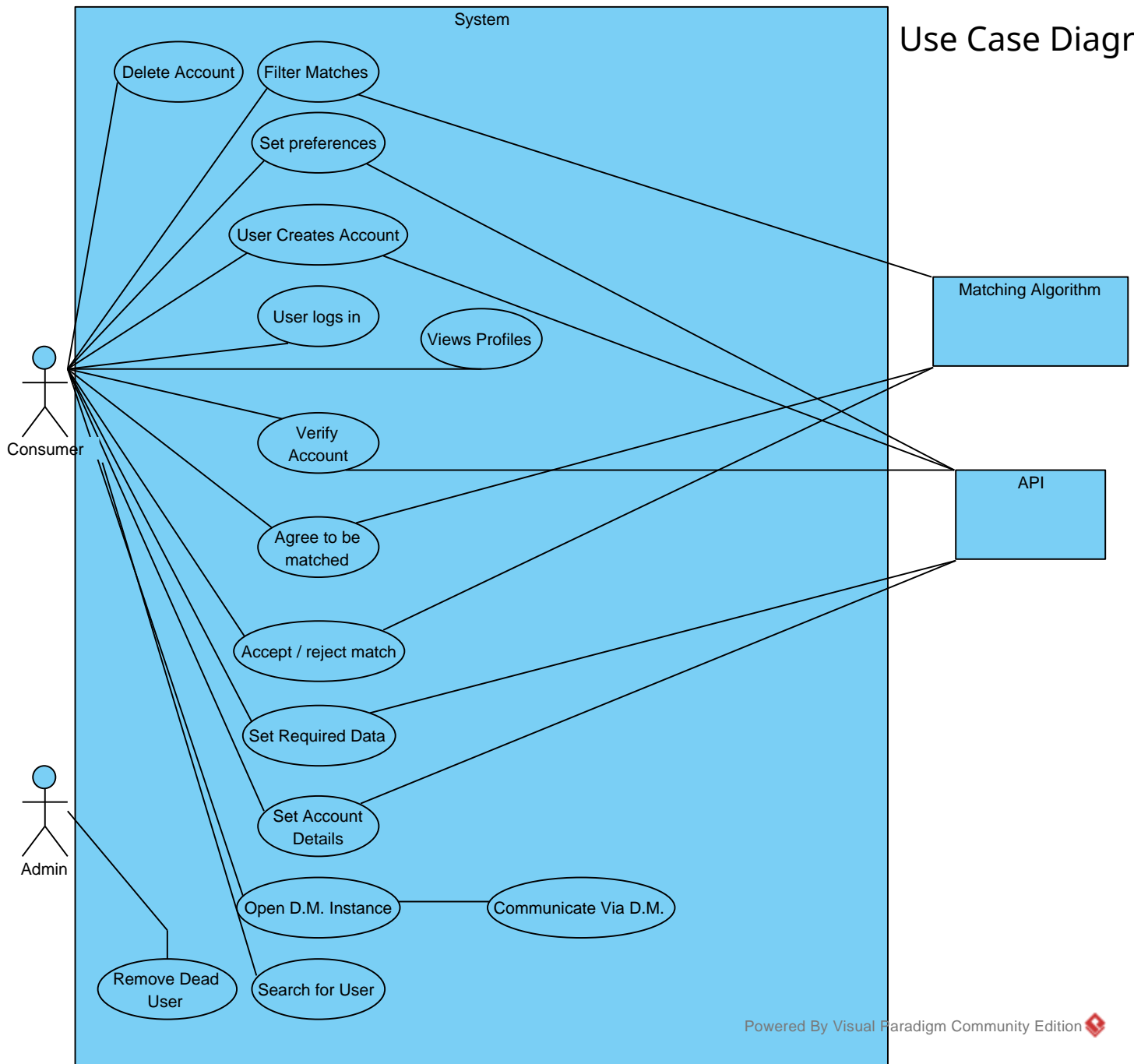
Main Success Scenario:

1. An account on Bicep Buddy has been inactive for too long.
2. The user is notified one final time.
3. Administrator uses special Admin sign in to log in.
4. Administrator navigates to all user view.
5. Administrator deletes the inactive user by pressing the delete button and confirming.
6. Administrator can see the that file has been delete.

Extensions:

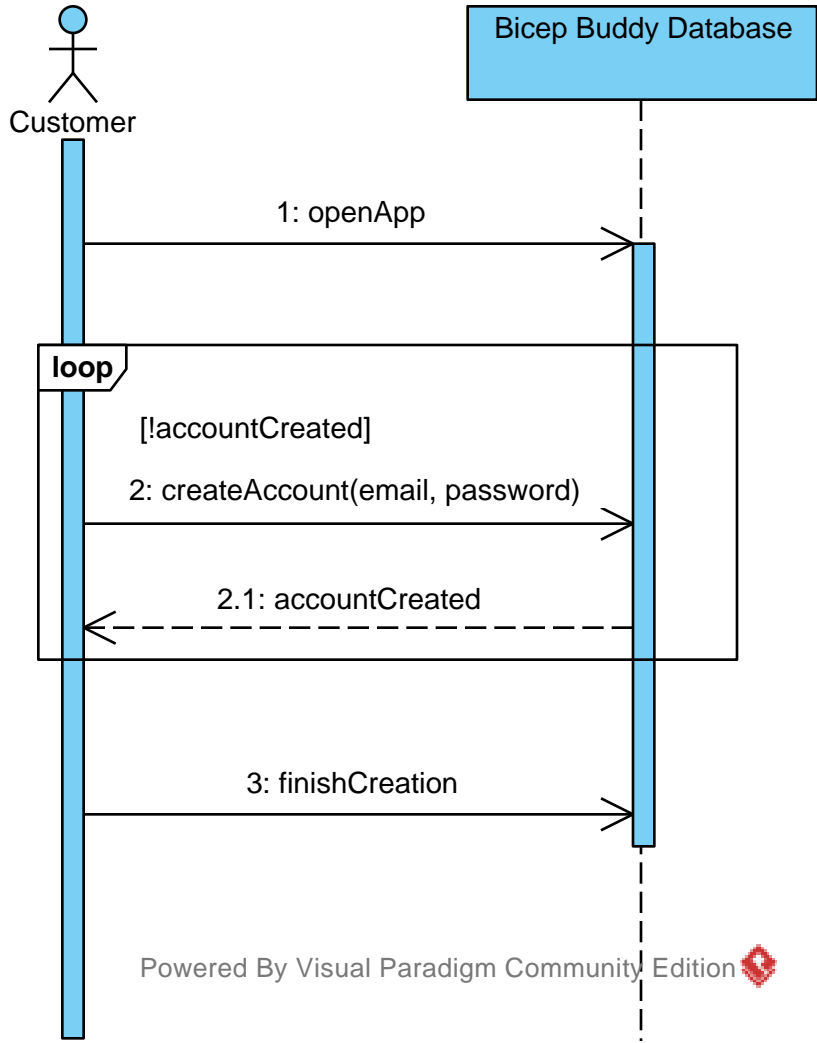
*a. If Bicep Buddy application is unresponsive at any time, close and reopen the application.

Use Case Diagram

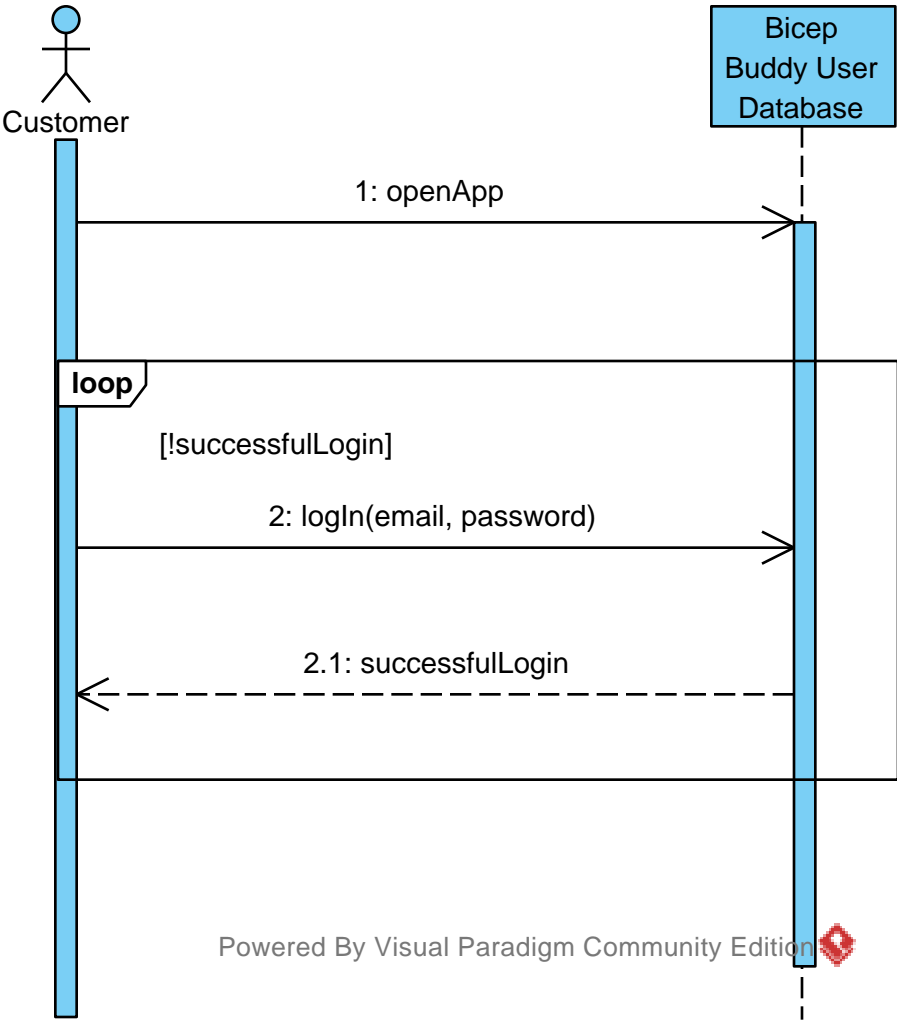


| Traceability Matrix | Requirements | | | | | | | |
|--|----------------------------|--------------------|---|---|--|---|--------------------------------|--|
| | 1. User can create account | 2. User can log in | 3. User can set details and preferences at account creation | 4. User can manage details and preferences at any time in their account | 5. User can accept and decline Bicep Buddy matches | 6. Efficient algorithm matches users based on preferences | 7. Passwords will be encrypted | 8. Accounts will have to be email verified |
| Use Cases | X | | | | | | X | |
| UC 1: User creates account | | X | | | | | X | |
| UC 2: User logs in | | | | | | | | X |
| UC 3: User verifies account | | | | | | | | |
| UC 4: User agrees to be matched | | | | | | X | | |
| UC 5: User views potential match profiles | | | | | | | | |
| UC 6: User accepts / rejects match | | | | | X | | | |
| UC 7: User sets required data after creation | | | X | | | | | |
| UC 8: User sets account details | | | | X | | | | |
| UC 9: User sets preferences | | | | X | | | | |
| UC 10: User filters matches | | | | | | | | |
| UC 11: User opens D.M. instance | | | | | | | | |
| UC 12: User communicates with match via D.M. | | | | | | | | |
| UC 13: User deletes account | | | | | | | | |
| UC 14: User searches for user by name | | | | | | | | |
| UC 15: Admin removes dead account | | | | | | | | |

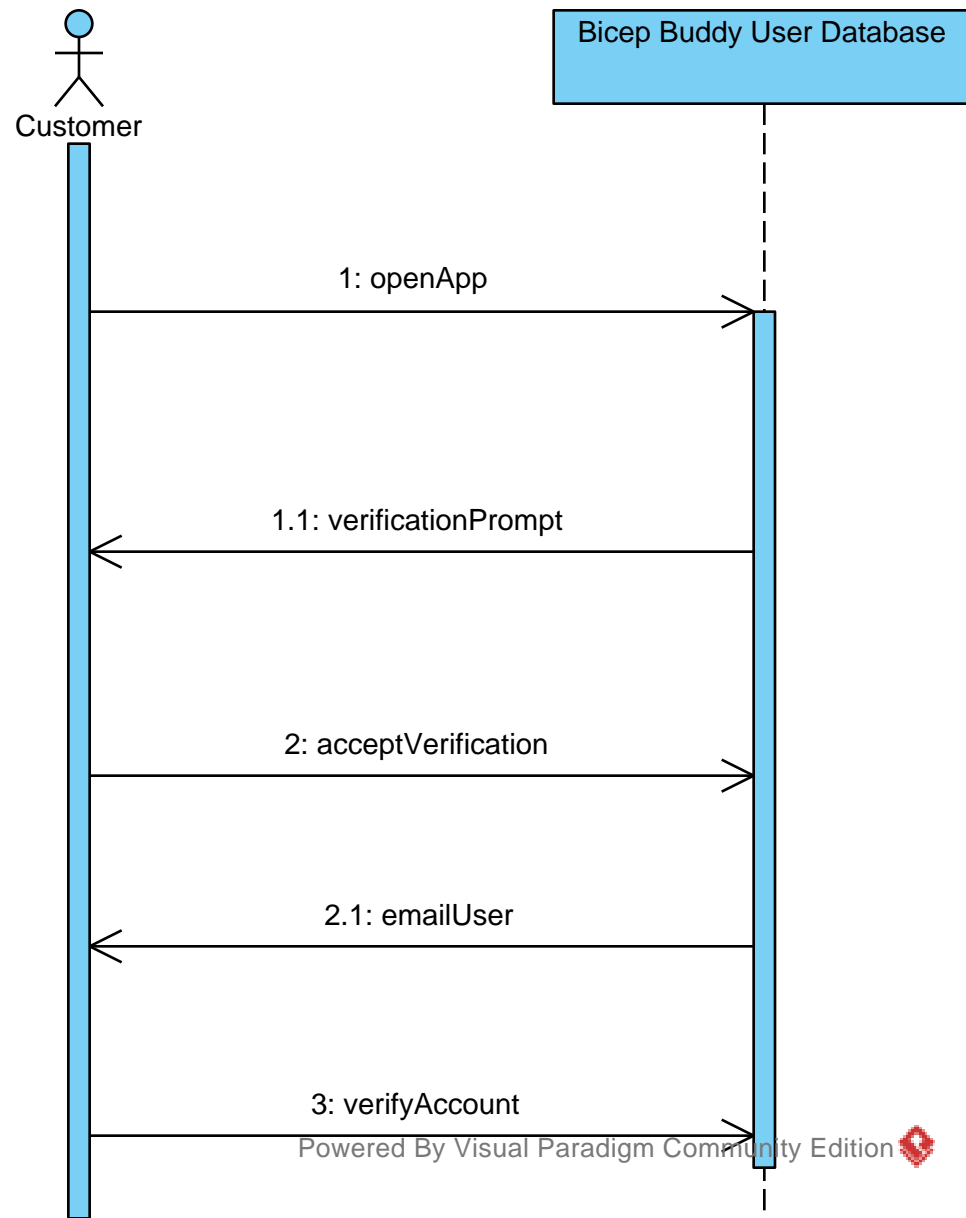
UC1 User Creates Account SSD



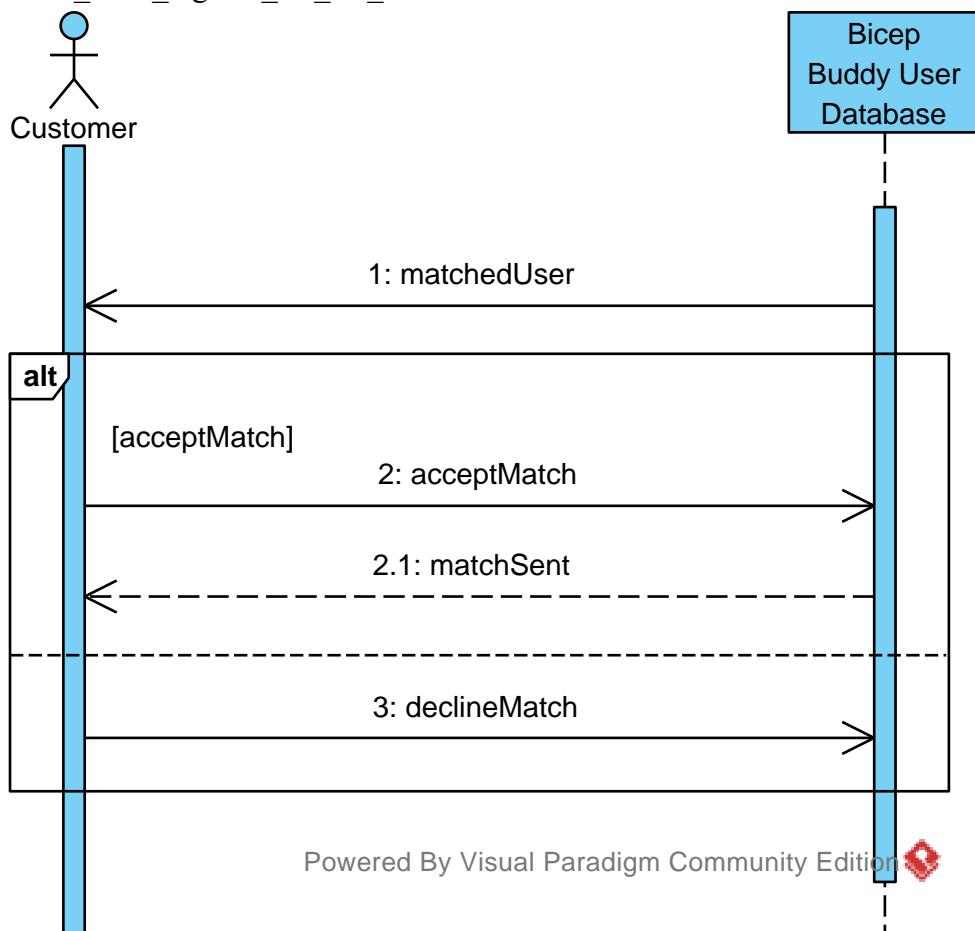
UC2_Customer logs in to Bicep Buddy application SSD



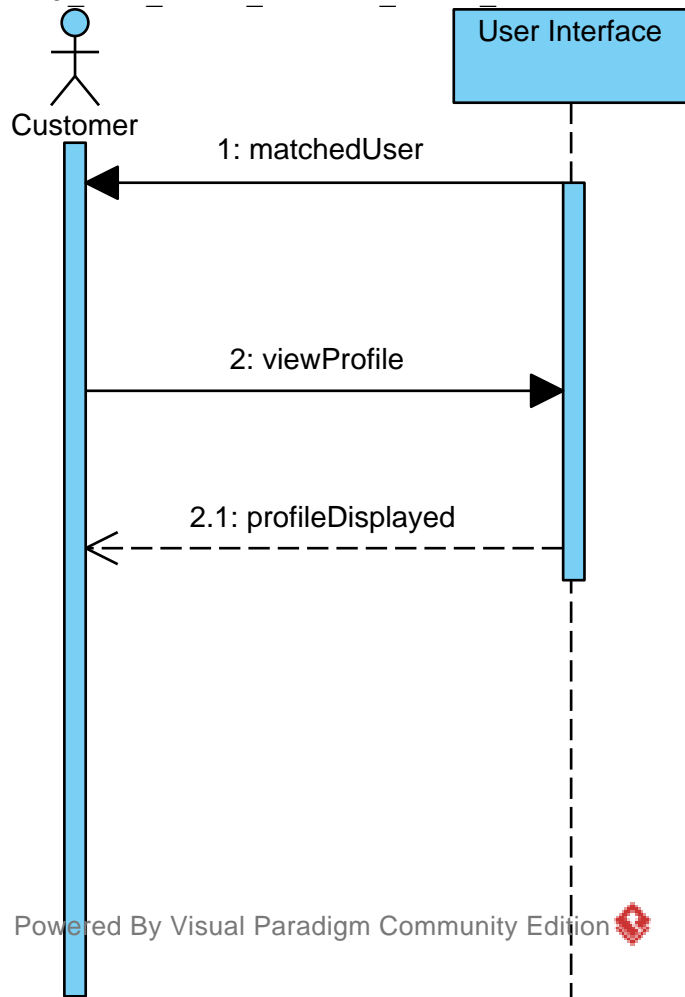
UC3_Customer verifies Bicep Buddy account SSD



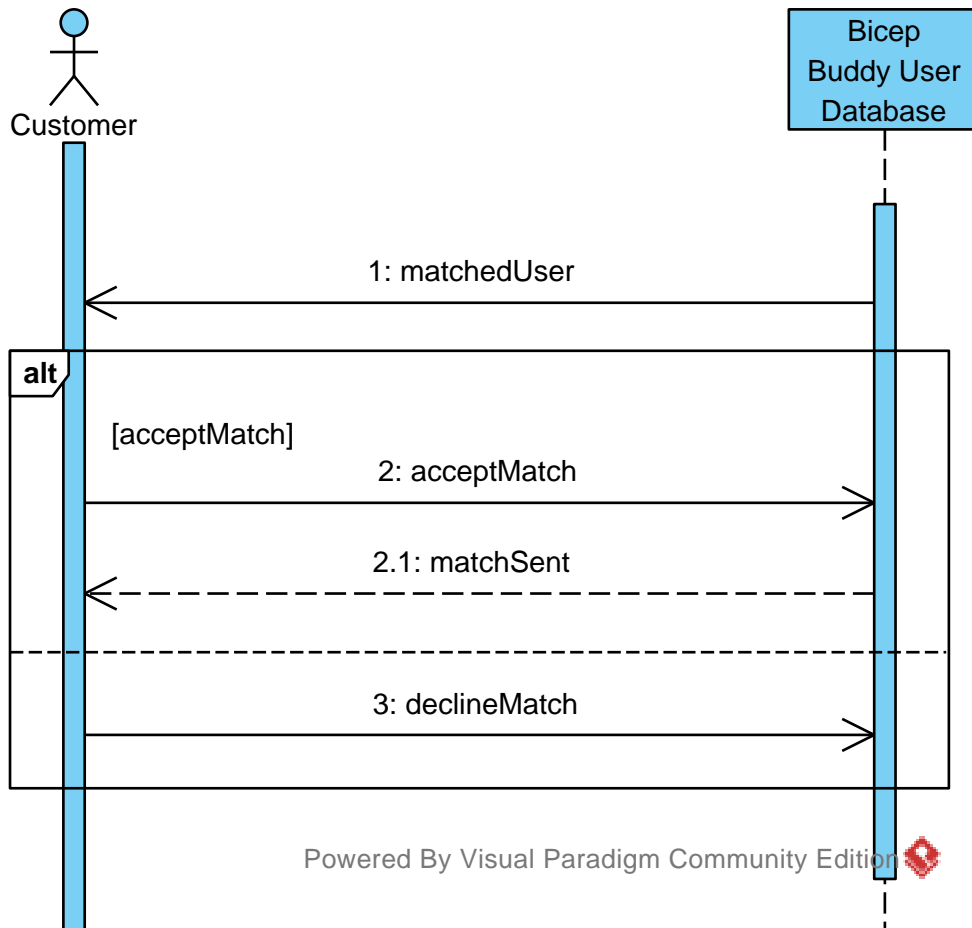
UC4_User_Agrees_To_Be_Matched



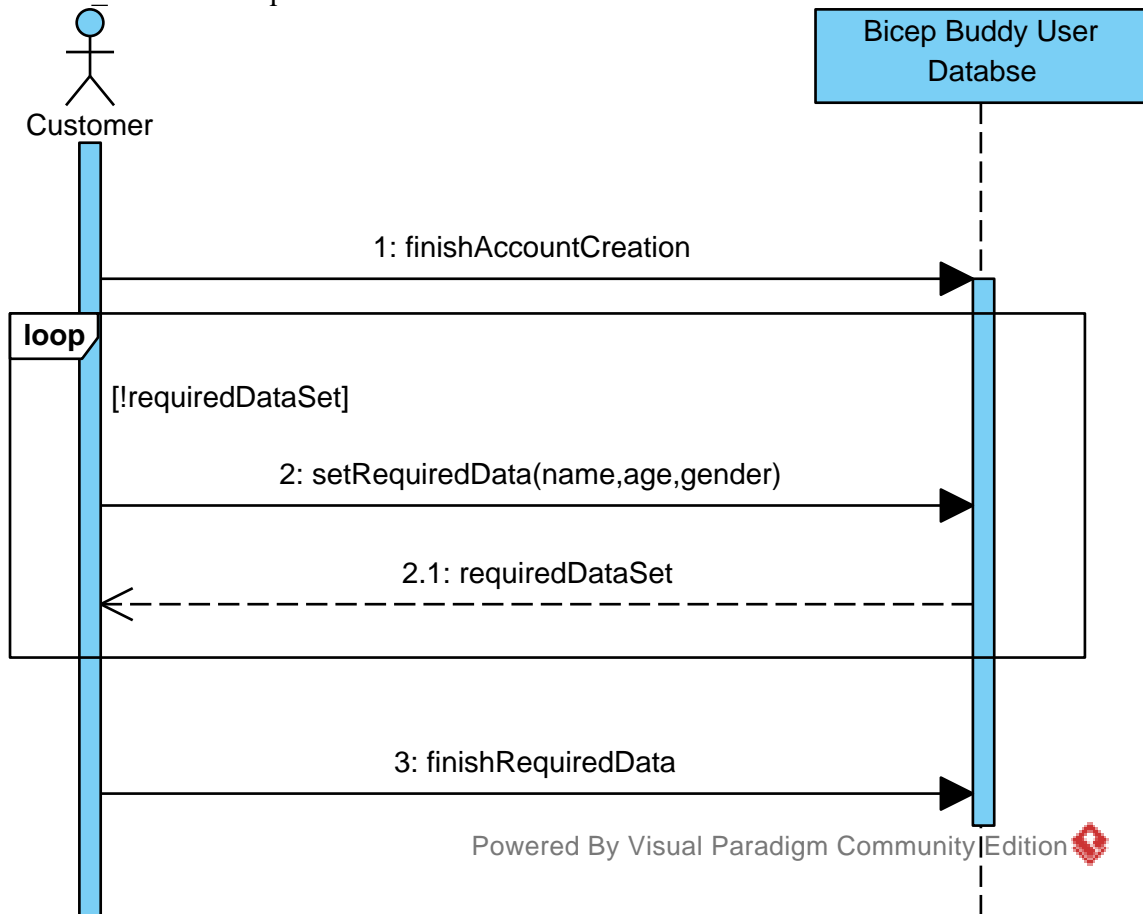
UC5 User_Views_Potential_Match_Profile



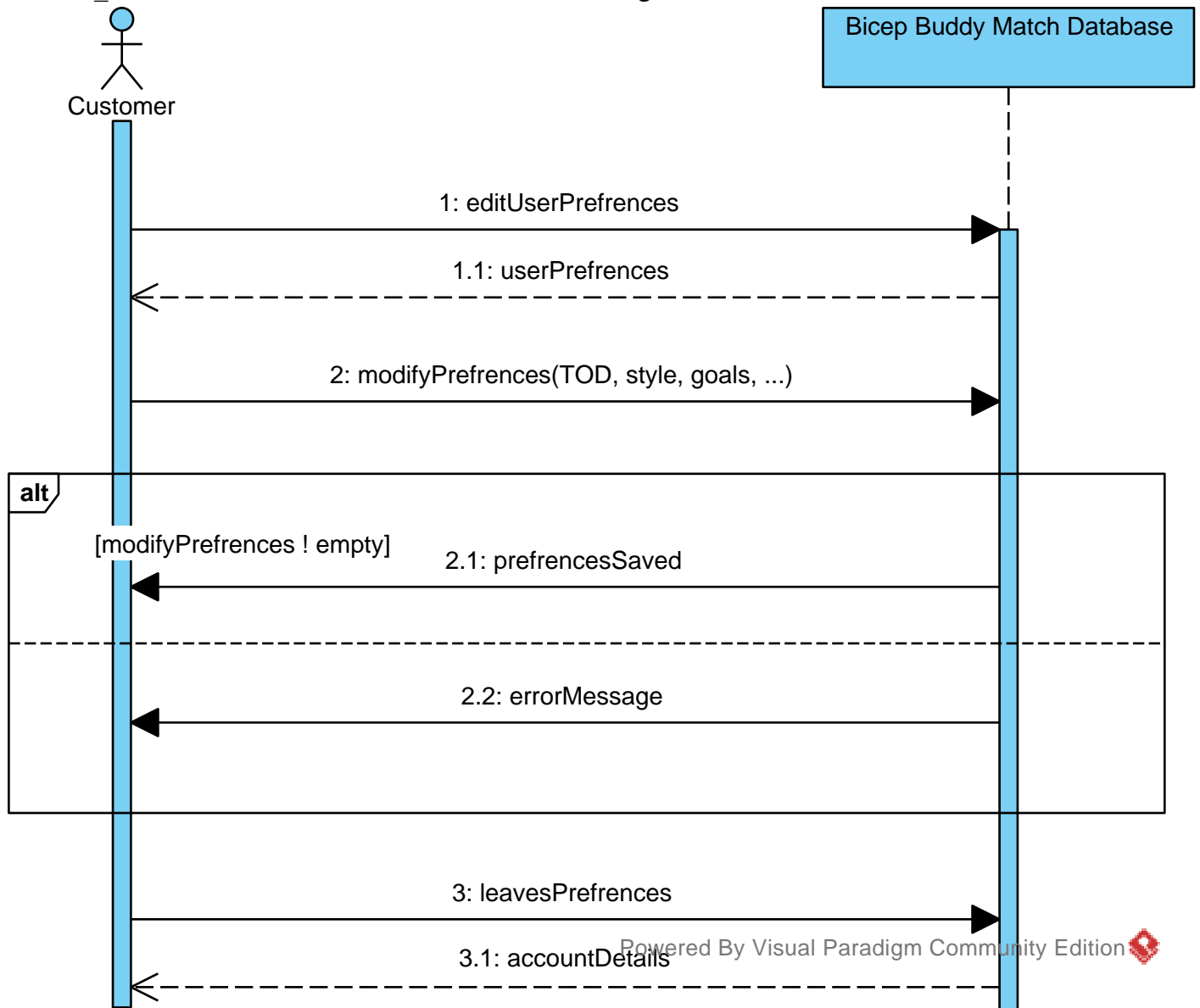
UC6_User_Accepts_Rejects_Match



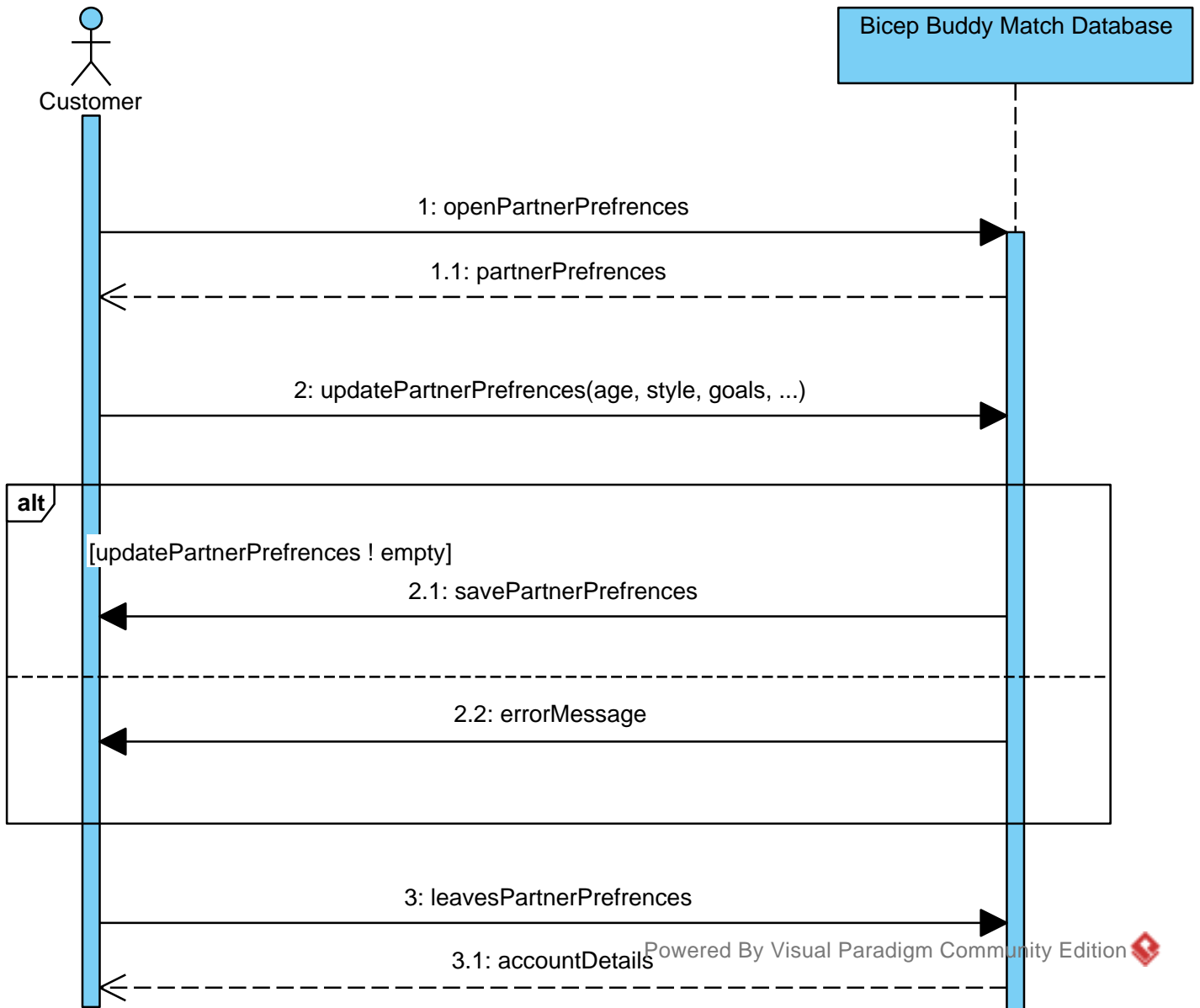
UC7 User sets required data after account creation



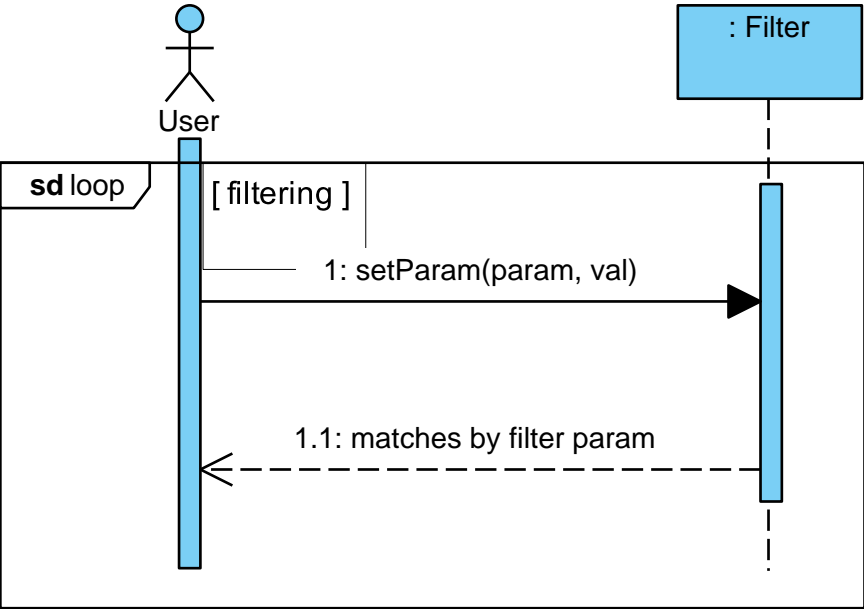
UC8_User sets account details to be used for matching



UC9_User sets preferences for those they match with

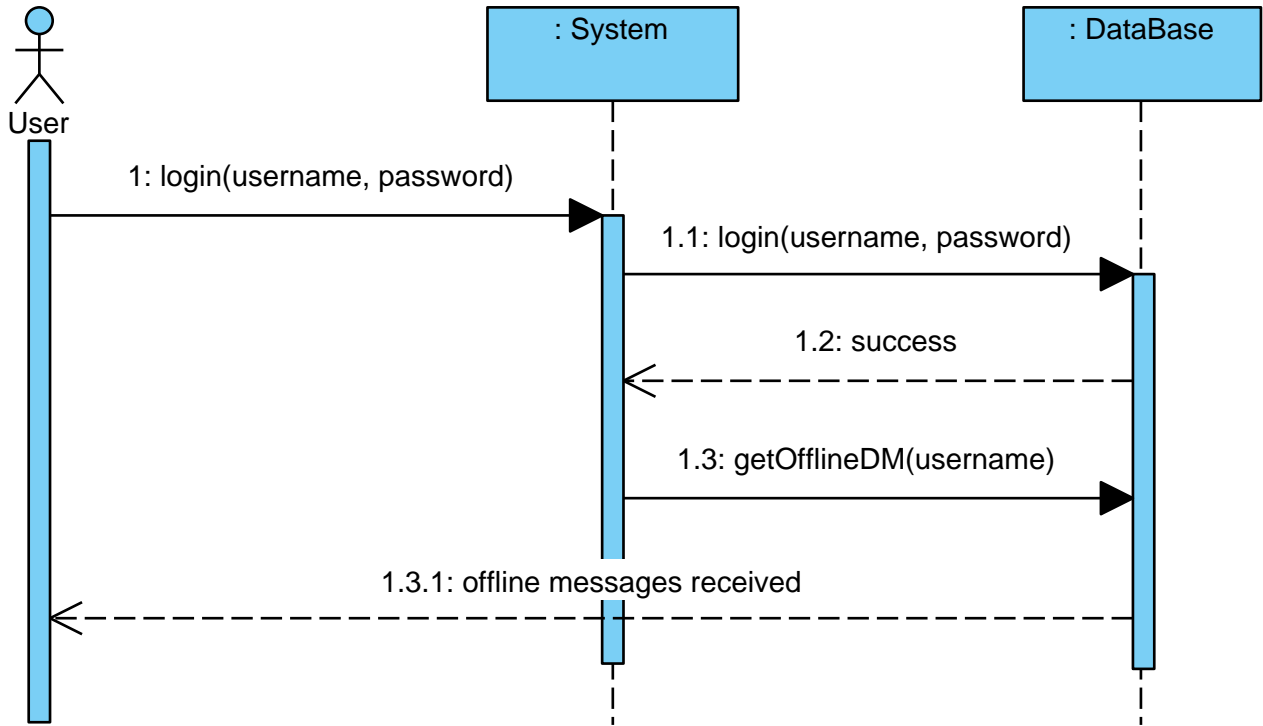


UC10_Filter



| | |
|-------------|---------------|
| Name | UC 10: Filter |
| Description | |
| Author | Hunter Long |
| | |

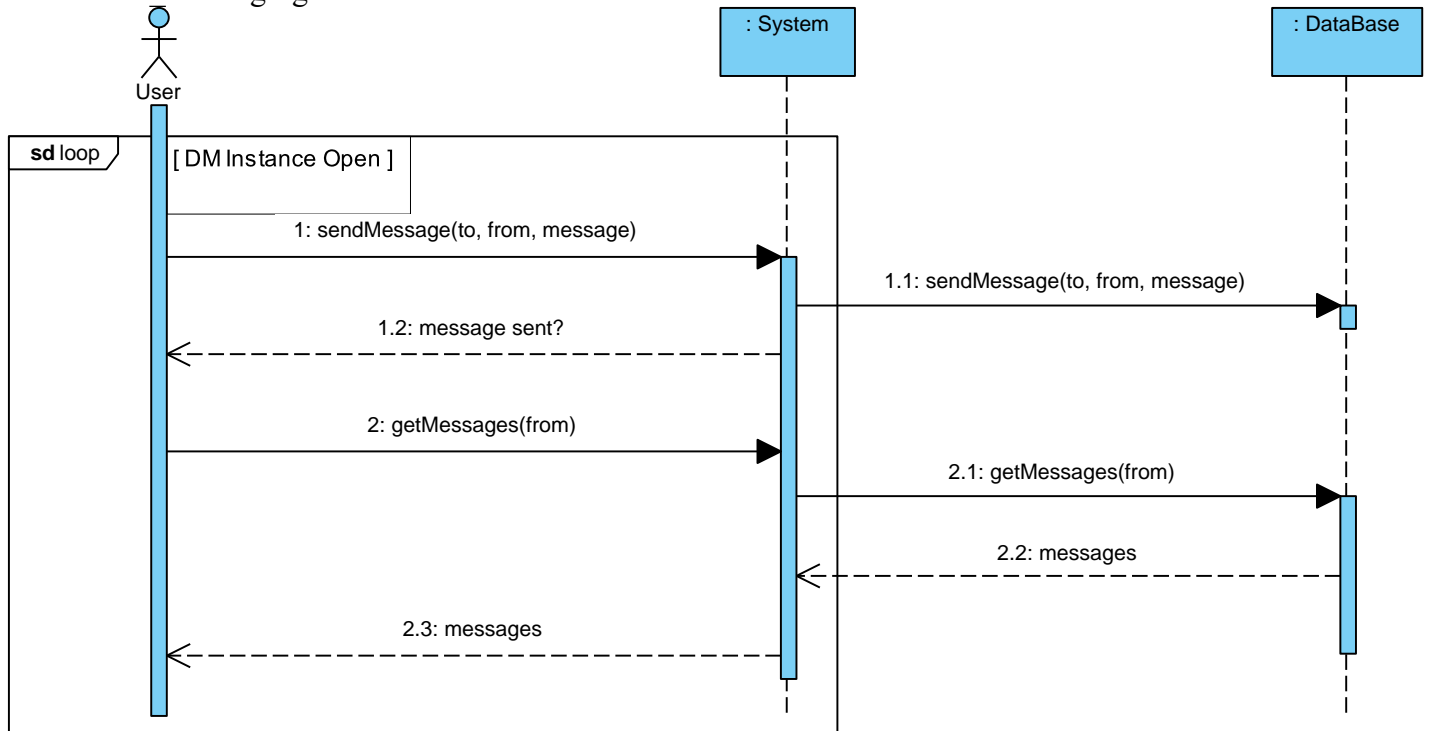
UC11_New DM Instance



| | |
|-------------|------------------------|
| Name | UC 11: New DM Instance |
| Description | |
| Author | Hunter Long |
| | |

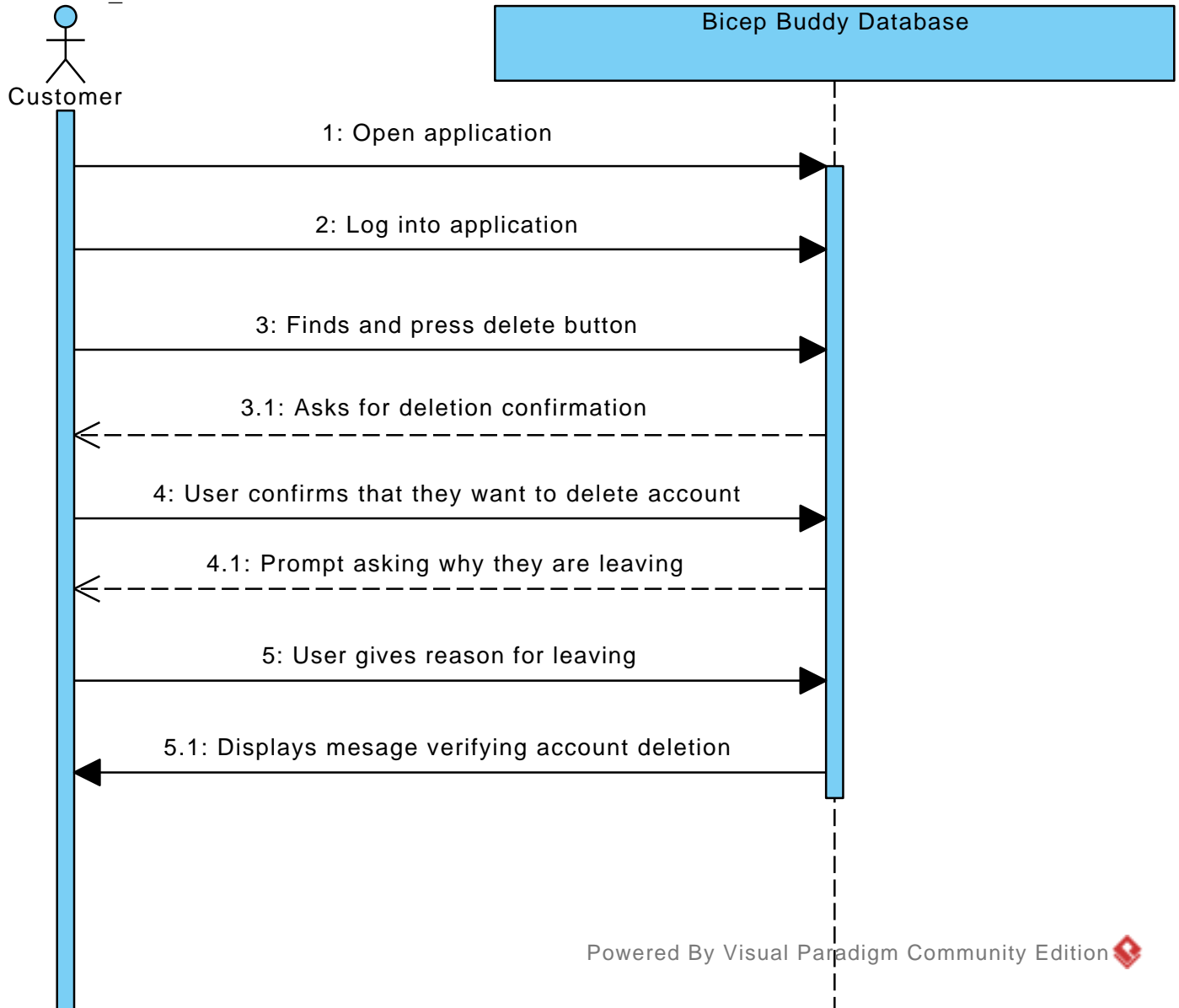


UC12 Messaging

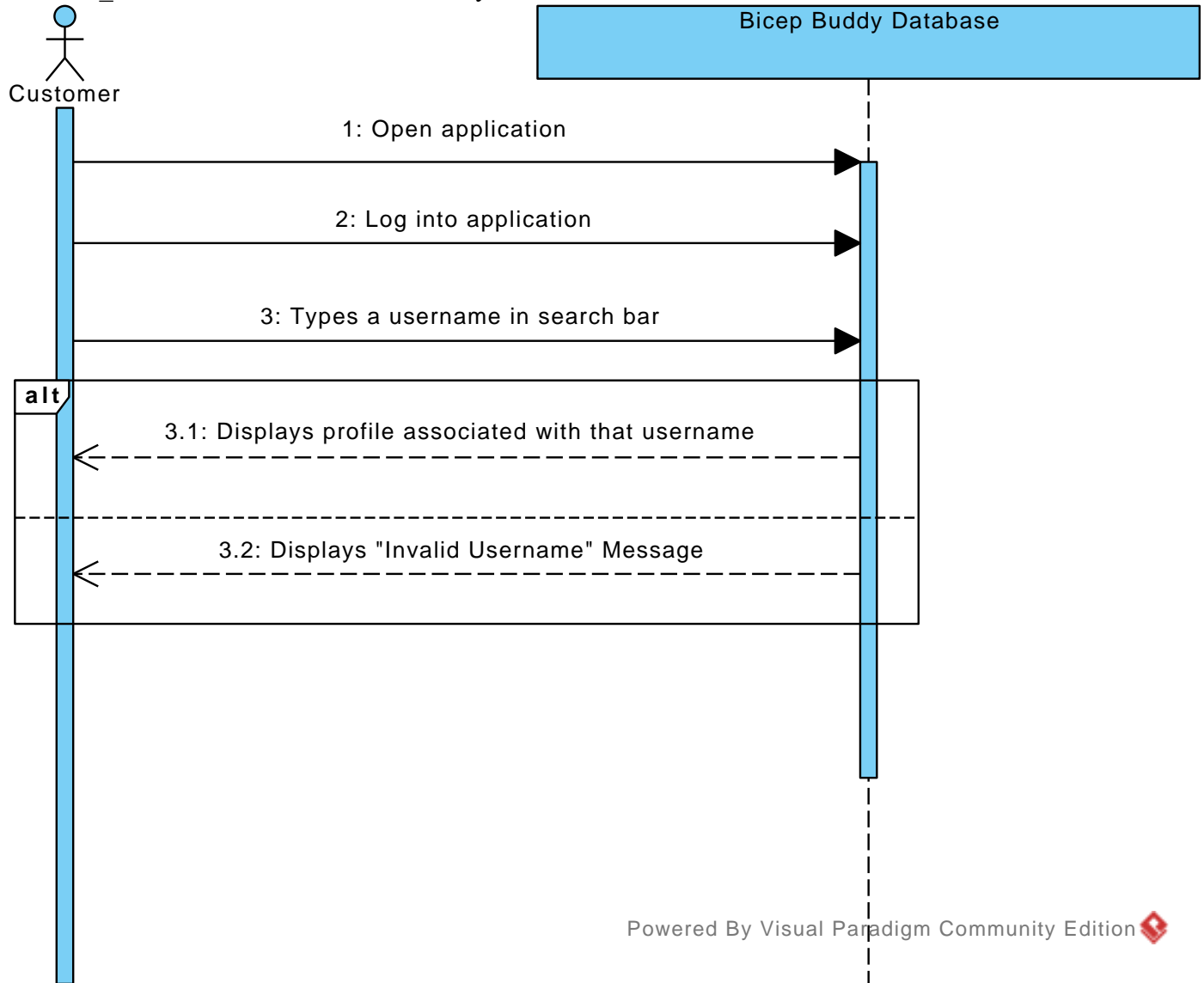


| | |
|-------------|------------------|
| Name | UC 12: Messaging |
| Description | |
| Author | Hunter Long |
| | |

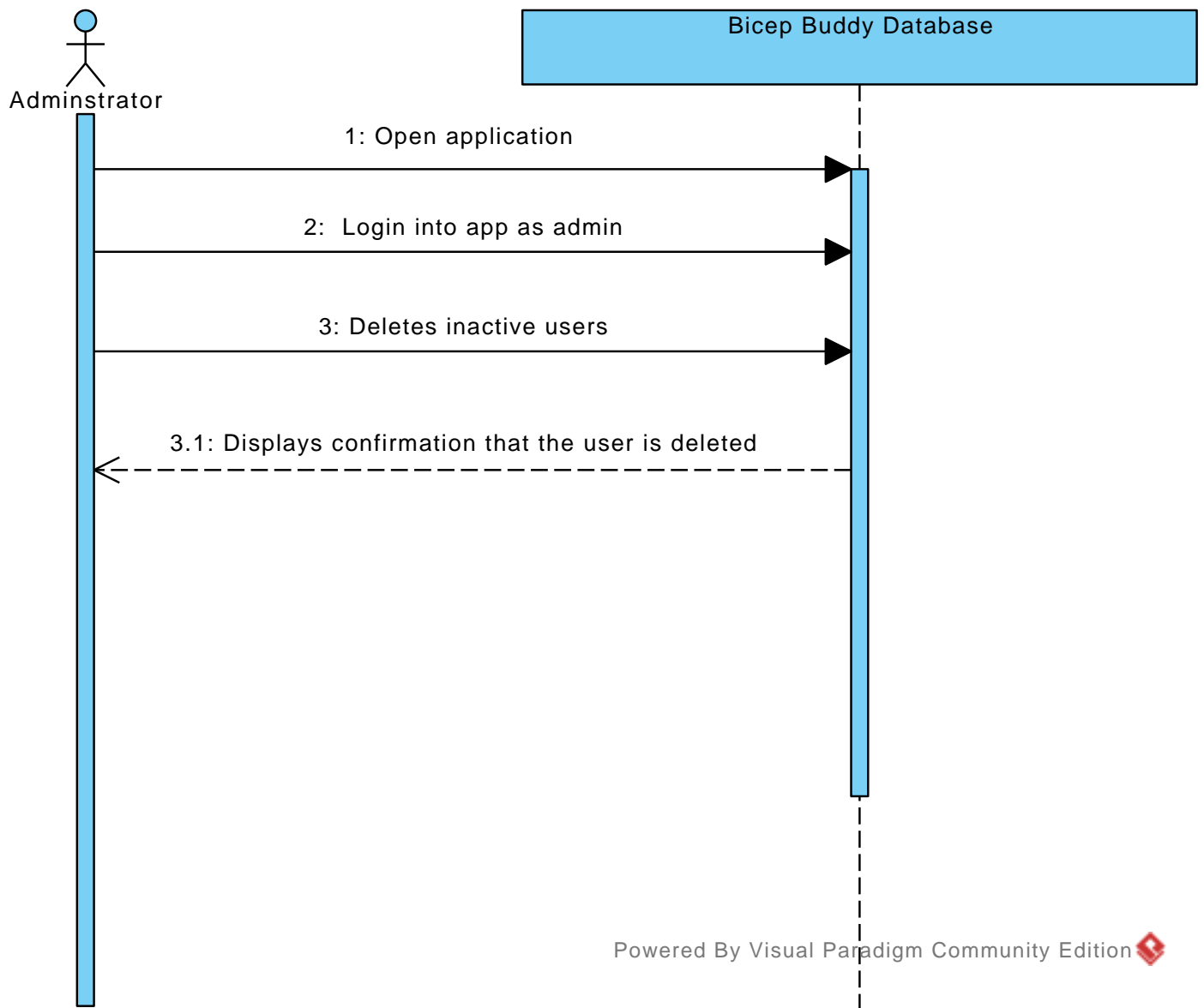
UC13_User deletes account



UC14_User searches for another user by username



UC15_Administrator removes dead or unverified accounts



Operation Contracts:

UC_1:

- openApp()
- createAccount(email, password)
- accountCreated()
- finishCreation

UC_2:

- openApp()
- login(email, password)
- successfulLogin()

UC_3:

- openApp()
- verificationPrompt()
- acceptVerification()
- emailUser()
- verifyAccount()

UC_4:

- matchedUser()
- acceptMatch()
- matchSent()
- declineMatch()

UC_5:

- matchedUser()
- viewProfile()
- profileDisplayed()

UC_6:

- matchedUser()
- acceptMatch()
- matchSent()
- declineMatch()

UC_7:

- finishAccountCreation()
- setRequiredData(name, age, gender, ...)
- requiredDataSet()
- finishedRequiredData()


UC_8:

- editUserPreferences()
- userPreferences()
- modifyPreferences(TOD, style, goals, ...)
- preferencesSaved()
- errorMessage()
- leavesPreferences()

```
    accountDetails()
UC_9:
    openPartnerPreferences()
    partnerPreferences()
    updatePartnerPreferences(age, style, goals, ...)
    savePartnerPreferences()
    errorMessage()
    leavesPartnerPreferences()
    accountDetails()
UC_10:
    setParam(param, val)
    matchParam()
UC_11:
    login(username, password)
    success()
    getOfflineDM(username)
    offlineMessagesRecieved()
UC_12:
    sendMessage(to, from, message)
    checkMessageStatus()
    getMessages(from)
    message()
UC_13:
    openApp()
    login(username, password)
    delete()
    deleteConfirmation()
UC_14:
    openApp()
    login(username, password)
    search(username)
    displayProfile(username)
    errorMessage()
UC_15:
    openApp()
    login(username, password, role)
    delete(arr[inactive users])
    confirmDelete()
```

Wireframe: Edit Account

Window Title



Select ▼

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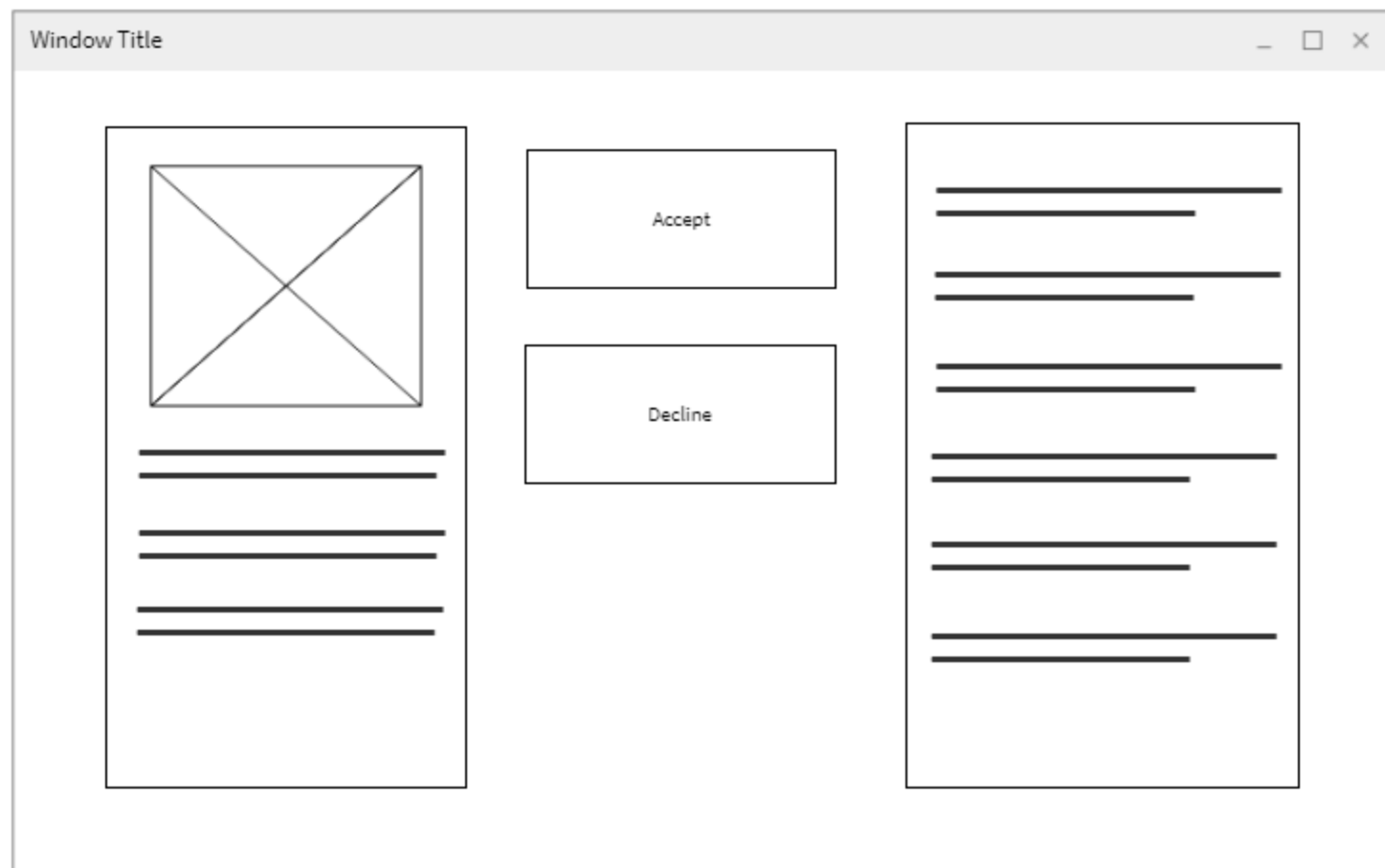
Select ▼

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Wireframe: Other User Profiles



Bicepy Buddy

Feb 5, 2019

Bicep Buddies 2019

<https://github.com/ChaseManseth/BicepBuddy>

Project manager

Chase Manseth

Project dates

Jan 22, 2019 - Feb 12, 2019

Completion

0%

Tasks

8

Resources

6

Tasks

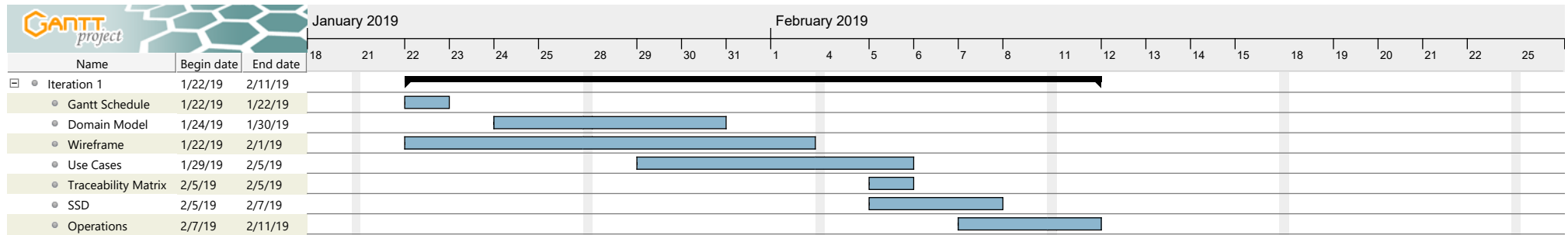
| Name | Begin date | End date |
|---------------------|------------|----------|
| Iteration 1 | 1/22/19 | 2/11/19 |
| Gantt Schedule | 1/22/19 | 1/22/19 |
| Domain Model | 1/24/19 | 1/30/19 |
| Wireframe | 1/22/19 | 2/1/19 |
| Use Cases | 1/29/19 | 2/5/19 |
| Traceability Matrix | 2/5/19 | 2/5/19 |
| SSD | 2/5/19 | 2/7/19 |
| Operations | 2/7/19 | 2/11/19 |

Resources

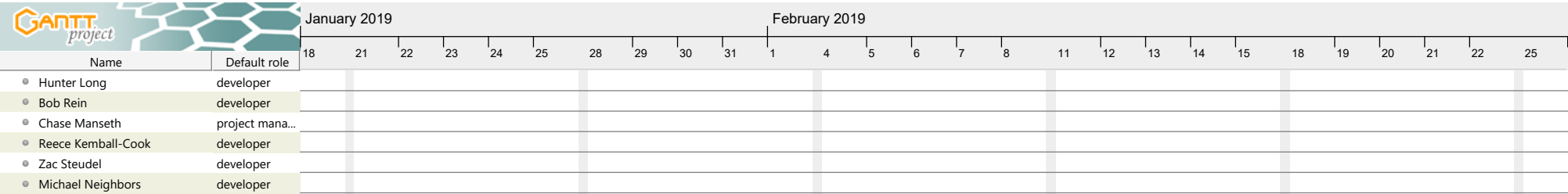
| Name | Default role |
|--------------------|-----------------|
| Hunter Long | developer |
| Bob Rein | developer |
| Chase Manseth | project manager |
| Reece Kemball-Cook | developer |
| Zac Steudel | developer |
| Michael Neighbors | developer |

Gantt Chart

4



Resources Chart



Hours worked

| Hunter | Bob | Zac | Reece | Chase |
|--------|-----|-----|-------|-------|
| 1.5 | 2 | 2 | 2 | 3 |
| 1 | 3 | 3 | 2 | 4 |
| 2 | 3 | 2 | 1 | 2 |
| 2 | 2 | 1 | 2 | 2 |
| 1.5 | 2 | 1 | 1 | 1.5 |
| 2 | 2 | 2 | 2 | 2 |
| 10 | 14 | 11 | 10 | 14.5 |

Bicep Buddy Point Distribution

Total 5 points

Zach Steudel: 1

Bob Rein: 1

Chase Manseth: 1

Reece Kemball-Cook: 1

Hunter Long: 1