

# DayDream

## Group 24: Project Backlog

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### **Problem Statement**

Planning a trip can often be very complicated and exhausting. Several logistical factors come into play, such as cost, location, date and time, lodging, excursions and transportation. Groups of people often find themselves overwhelmed when attempting to organize such trips.

Our platform seeks to provide a workspace in which groups can clearly organize their ideas for more effective planning. There are other apps on the market similar to DayDreams, however, they are made for one person, and do not offer as many features. One person can plan a trip on these apps, however, they do not provide functionality for groups of people, nor do they have a progress tracker for important information, such as funds, hotels, restaurants, and attractions. DayDreams will also enable the groups to post pictures from the trip, which can be viewed later by everyone in the group to relive the memories.

### **Background Info:**

### **Audience**

Our target audience will encompass a wide range of ages. Our website will cater to anyone who seeks a workspace that allows them to organize and plan for their trip.

### **Functional Requirements**

1. As a user, I would like to be able to register for a DayDream account.
2. As a user, I would like to be able to log in.
3. As a user, I would like to be able to edit my email address.
4. As a user, I would like my password to be reset if I forget it.
5. As a user, I would like to be able to change my password.
6. As a user, I would like to be able to create a Circle of people.
7. As a user, I would like to be able to edit my Circle of people.
8. As a user, I would like to be able to remove a Circle of people.
9. As a user, I would like to be able to create a DayDream.
10. As a user, I would like to be able to edit a DayDream.

11. As a user, I would like to be able to delete a DayDream.
12. As a user, I would like to be able to track my progress towards savings
13. As a user, I would like to be able to view our group progress towards savings
14. As a user, I would like to be able to create a transportation plan.
15. As a user, I would like to be able to edit an existing transportation plan.
16. As a user, I would like to be able to delete an existing transportation plan.
17. As a user, I would like to be able to view all my transportation plans in a transportation widget
18. As a user, I would like to be able to create a lodging plan.
19. As a user, I would like to be able to edit an existing lodging plan.
20. As a user, I would like to be able to delete an existing lodging plan.
21. As a user, I would like to be able to view all my lodging plans in a lodging widget
22. As a user, I would like to be able to create an excursion plan.
23. As a user, I would like to be able to edit an existing excursion plan.
24. As a user, I would like to be able to delete an existing excursion plan.
25. As a user, I would like to be able to view all my excursion plans in an excursion widget
26. As a user, I would like to be able to categorize my excursion plans.
27. As a user, I would like to have my costs totaled for me based on the costs of the transportation, lodging, and excursion widgets.
28. As a user, I would like to be able to move a completed DayDream to Memories.
29. As a user, I would like to be able to view Memories.
30. As a user, I would like to be able to delete a Memory.
31. As a user, I would like to be able to view all photos from the DayDream in my Memories
32. As a user, I would like to be able to group chat with members of my circle

## **Nonfunctional Requirements**

### **Architecture and Performance**

We will be developing the application with a separate frontend and backend. This will allow us to effectively divide our work between the members in our group, decrease the compatibility issues between the two sides, and also make version control a lot easier. We plan on using the MEAN stack (MongoDB, Express, Angular, and Node) as it is a popular and proven software stack with lots of resources and documentation for when we need assistance. The frontend will be constructed using React and will pull data from the backend via requests to the API. Separating the backend from the frontend will also ease the burden of expanding to more platforms such as iOS or Android.

## Security

Since we will be storing a lot of information sensitive to our users, we want to take the necessary measures to make sure our application is secure. There are many existing modules that can be easily integrated into Express/Node that includes several security features to fight against common exploits. Furthermore, we will be limiting access to features on the website through the use of user roles and requiring authentication for all API requests in order to prevent exploitation of backend routes. We will also be utilizing hashing to make sure sensitive information in our database is secure such as with passwords.

## Usability

The interface will be easy to navigate for users, with an intuitive and simple user interface. Organization will be important, with lots of features, to make sure the home page and screen is not too cluttered. Any user should be able to navigate the website on their own accord, and without needing a demonstration or tutorial. As our target audience will be variable (a wide range of ages) we want to make sure people with different levels of technological fluency will all be able to use our website without issue.

## Hosting/Deployment

For hosting, many of our team members have existing experience deploying using Heroku and it is well integrated with GitHub, which is the platform we will be using to handle version control. Having continuous integration and deployment with GitHub through Heroku will allow our development process to move much more efficiently.

## Use Cases

1. As a user, I would like to be able to register for a DayDream account.

| Case: Register for a DayDream account  |                                |
|--|--------------------------------|
| Action                                 | System Response                |
| 1. Click 'Register'                    | 2. Redirect to a Register page |
| 3. Input email, username, and password | 5. Redirect to Home page       |
| 4. Click 'Submit'                      |                                |

2. As a user, I would like to be able to log in.

| Case: Login to DayDream account |                             |
|---------------------------------|-----------------------------|
| Action                          | System Response             |
| 1. Click 'Login'                | 2. Redirect to a Login page |
| 3. Input email and password     | 5. Redirect to Home page    |
| 4. Click 'Submit'               |                             |

3. As a user, I would like to be able to edit my email address.

| Case: Edit Email Address   |                                    |
|----------------------------|------------------------------------|
| Action                     | System Response                    |
| 1. Click 'Edit Profile'    | 2. Redirect to 'Edit Profile' page |
| 3. Input new email address | 5. Redirect to Home page           |
| 4. Click 'Save'            |                                    |

4. As a user, I would like my password to be reset if I forget it.

| Case: Reset password for a DayDream account |   |
|---|---|
| Action                                      | System Response                             |
| 1. Click 'Reset password'                   | 2. Send temporary password in email to user |
| 3. User logs in with temporary password     | 5. Redirect to login                        |
| 4. Click 'Change password'                  |   |

5. As a user, I would like to be able to change my password.

| Case: Change password for a DayDream account |   |
|--|---|
| Action                                       | System Response                                       |
| 1. Click 'Edit Profile'                      | 2. Redirect to 'Edit Profile' page                    |
| 3. Click 'Change Password'                   | 4. Redirect to 'Change Password' page                 |
| 4. Input new password                        | 8. Send password change confirmation in email to user |
| 5. Input new password again for confirmation |   |
| 6. Input old password                        |   |
| 7. Click 'Save Changes'                      |   |

6. As a user, I would like to be able to create a circle of people.

| Case: Create a Circle of people |  |
|---------------------------------|--|
| Action                          | System Response                            |
| 1. Click 'Create a New Circle'  | 2. Redirects to 'Create a New Circle' page |
| 3. Input Name of Circle         | 6. Redirects to newly created circle page  |
| 4. Input usernames              |  |
| 5. Click 'Create'               |  |

7. As a user, I would like to be able to edit my circle of people.

| Case: Edit My Circle   |   |
|--|---|
| Action   | System Response   |
| 1. Click 'Edit Circle'   | 2. Redirect to 'Edit Circle' page   |
| 3. Click on 'Add People' or 'Remove people'                                | 6. System searches and adds users specified by the user, or removes a user specified to the Circle object |
| 4. Enter users to be added to the Circle, or clicks on users to be removed | 7. System updates new Circle Object to the database   |
| 5. Click 'Save'  | 8. Redirect to Home page  |

8. As a user, I would like to be able to remove a circle of people.

| Case: Remove a circle of people |  |
|---------------------------------|--|
| Action                          | System Response                        |
| 1. Click 'Remove circle'        | 2. Prompt user with confirmation       |
| 3. Click 'Confirm'              | 4. System removes Circle from database |
|                                 |  |

9. As a user, I would like to be able to create a DayDream.

| Case: Create a DayDream    |   |
|----------------------------|---|
| Action                     | System Response                             |
| 1. Click 'Create DayDream' | 2. Redirect to form submission of DayDream  |
| 3. User fills out form     | 4. System saves DayDream object in database |

10. As a user, I would like to be able to edit a DayDream.

| Case: Edit a DayDream       |   |
|-----------------------------|---|
| Action                      | System Response                                       |
| 1. Click on 'Edit DayDream' | 2. Redirect to 'Edit DayDream' page                   |
| 3. User edits DayDream name | 5. System updates the DayDream object in the database |
| 4. User clicks 'Save'       | 6. Redirect to DayDreams page                         |

11. As a user, I would like to be able to delete a DayDream.

| Case: Delete a DayDream       |   |
|-------------------------------|---|
| Action                        | System Response                         |
| 1. Click on 'Edit DayDream'   | 2. Redirect to 'Edit DayDream' page     |
| 3. Click on 'Delete DayDream' | 4. 'Confirm Delete' dialog appears      |
| 5. Click on 'Confirm'         | 6. 'DayDream Deleted' dialog appears    |
|                               | 7. 'DayDream Deleted' dialog disappears |

12. As a user, I would like to be able to track my progress towards savings

| Case: Track my progress towards savings |  |
|---|--|
| Action                                  | System Response  |
| 1. Click on specific Daydream           | 2. Redirect to chosen DayDream                               |
| 4. Click on edit current savings        | 3. Daydream page shows current savings out of savings needed |
| 6. Input current savings                | 5. Redirect to 'Edit Savings' page                           |
|   | 7. Update Daydream page to new savings value                 |

13. As a user, I would like to be able to view our group progress towards savings

| Case: View our group progress towards savings |   |
|---|---|
| Action  | System Response   |
| 1. Click on specific Daydream                 | 2. Redirect to chosen Daydream  |
|   | 3. Display sum of group savings out of total savings needed as well as how much each user has contributed |

14. As a user, I would like to be able to create a transportation plan.

| Case: Create a transportation plan                  |   |
|---|---|
| Action  | System Response   |
| 1. Click on 'Add' under transportation banner       | 2. System opens up dialog box for transportation information                                  |
| 3. User fills out form with appropriate information | 5. Transportation object is created and saved under the appropriate DayDream in the database. |
| 4. Click on 'Save'                                  | 6. Dialog box closes  |

15. As a user, I would like to be able to edit an existing transportation plan.

| Case: Edit an existing transportation plan |   |
|--|---|
| Action                                     | System Response   |
| 1. Click on 'Edit Transportation Method'   | 2. Redirect to 'Edit Transportation' page                   |
| 3. User edits Transportation name          | 5. System updates the Transportation object in the database |
| 4. User clicks 'Save'                      | 6. Redirect to DayDreams page                               |



16. As a user, I would like to be able to delete an existing transportation plan.

| Case: Delete an existing transportation plan  |  |
|---|--|
| Action  | System Response  |
| 1. Click on transportation information banner | 2. Display transportation information, including red delete button |
| 3. Click on 'Delete transportation' plan      | 5. Delete transportation information from database                 |
| 4. User clicks confirm                        | 6. Exit window   |

17. As a user, I would like to be able to view all my transportation plans in a transportation widget

| Case: View all my transportation plans in a transportation widget |   |
|---|---|
| Action  | System Response                             |
| 1. Click on transportation widget                                 | 2. Display all created transportation plans |
| 3. Click on collapse widget icon                                  | 4. Hide all created transportation plans    |

18. As a user, I would like to be able to create a lodging plan.

| Case: Create a lodging plan                         |  |
|---|--|
| Action  | System Response  |
| 1. Click add under lodging banner                   | 2. System opens up text box where user will submit lodging information |
| 3. User fills out form with appropriate information | 5. Lodging information is saved in DayDream object                     |
| 4. Click on 'Save'                                  | 6. Text box closes   |

19. As a user, I would like to be able to edit an existing lodging plan.

| Case: Edit an existing lodging plan |   |
|-------------------------------------|---|
| Action                              | System Response                                       |
| 1. Click on 'Edit DayDream'         | 2. Redirect to 'Edit DayDream' page                   |
| 3. User edits DayDream name         | 5. System updates the DayDream object in the database |
| 4. User clicks 'Save'               | 6. Redirect to DayDreams page                         |

20. As a user, I would like to be able to delete an existing lodging plan.

| Case: Delete an existing lodging plan  |   |
|--|---|
| Action                                 | System Response   |
| 1. Click on lodging information banner | 2. Display lodging information, including red delete button |
| 3. Click on 'Delete Lodging plan       | 5. Delete lodging information from database                 |
| 4. User clicks confirm                 | 6. Exit window  |

21. As a user, I would like to be able to view all my lodging plans in a lodging widget

| Case: View all my lodging plans in a lodging widget |                                      |
|---|--------------------------------------|
| Action  | System Response                      |
| 1. Click on lodging widget                          | 2. Display all created lodging plans |
| 3. Click on collapse widget icon                    | 4. Hide all created lodging plans    |

22. As a user, I would like to be able to create an excursion plan.

| Case: Create an excursion plan            |   |
|---|---|
| Action                                    | System Response   |
| 1. Click add under excursion banner       | 2. System opens up text box where user will add excursion information |
| 3. User fills out appropriate information | 5. Excursion information is saved in DayDream object                  |
| 4. Click on 'Save'                        | 6. Exit window  |

23. As a user, I would like to be able to edit an existing excursion plan.

| Case: Edit an existing excursion plan |   |
|---------------------------------------|---|
| Action                                | System Response                                       |
| 1. Click on 'Edit DayDream'           | 2. Redirect to 'Edit DayDream' page                   |
| 3. User edits DayDream name           | 5. System updates the DayDream object in the database |
| 4. User clicks 'Save'                 | 6. Redirect to DayDreams page                         |

24. As a user, I would like to be able to delete an existing excursion plan.

| Case: Delete an existing excursion plan |   |
|---|---|
| Action                                  | System Response   |
| 1. Click on excursion banner            | 2. Display excursion information, including red delete button |
| 3. Click on 'Delete excursion'          | 5. Delete excursion from database                             |
| 4. User clicks confirm                  | 6. Exit window  |

25. As a user, I would like to be able to view all my excursion plans in an excursion widget

| Case: View all my excursion plans in an excursion widget |  |
|--|--|
| Action   | System Response                        |
| 1. Click on excursion widget                             | 2. Display all created excursion plans |
| 3. Click on collapse widget icon                         | 4. Hide all created excursion plans    |

26. As a user, I would like to be able to categorize my excursion plans.

| Case: Categorize my excursion plans        |   |
|--|---|
| Action                                     | System Response   |
| 1. Click on excursion banner               | 2. Display excursion information, including red delete button |
| 3. Click on select category drop down menu | 4. Display possible categories                                |
| 5. Select category                         | 6. Add category to excursion info                             |
| 7. User clicks confirm                     | 8. Exit window  |

27. As a user, I would like to have my costs totaled for me based on the costs of the transportation, lodging, and excursion widgets.

| Case: Costs totaled for me based on the costs of the transportation, lodging, and excursion widgets |   |
|---|---|
| Action  | System Response   |
| 1. Select DayDream  | 2. Find the costs for all widgets (from past user input, default = 0) |
|   | 3. Sum costs of all widgets   |
|   | 4. Display costs on top of the page                                   |

28. As a user, I would like to be able to move a completed DayDream to Memories.

| Case: Move a completed DayDream to Memories |  |
|---|--|
| Action                                      | System Response  |
| 1. Select DayDream                          | 2. Display DayDream information, with button that says 'completed' |
| 3. Click 'completed' button                 | 4. Confirm if user wants to complete DayDream                      |
| 4. Confirm                                  | 6. Move DayDream to memories page                                  |

29. As a user, I would like to be able to view Memories.

| Case: View Memories  |                                |
|--|--------------------------------|
| Action   | System Response                |
| 1. On home page, scroll down until you see the memories banner | 2. Have all memories displayed |

30. As a user, I would like to be able to delete a Memory.

| Case: Delete a Memory  |   |
|--|---|
| Action   | System Response                             |
| 1. On home page, scroll down until you see the memories banner | 2. Have all memories displayed              |
| 3. Select memory   | 4. Display all information for memory       |
| 5. Click 'delete memory'                                       | 6. Confirm that user wants to delete memory |
| 7. Confirm   | 8. Delete memory and reload page            |

31. As a user, I would like to be able to view all photos from the DayDream in my Memories

| Case: View all photos from the DayDream in my Memories         |                                 |
|--|---------------------------------|
| Action   | System Response                 |
| 1. On home page, scroll down until you see the memories banner | 2. Have all memories displayed  |
| 3. Click on memory   | 4. Display memory information   |
| 5. Click view photos from DayDream                             | 6. Display photos from DayDream |

32. As a user, I would like to be able to group chat with members of my circle

| Case: Group chat with members of my circle |  |
|--|--|
| Action                                     | System Response  |
| 1. Click on 'Chat' button in circles page  | 2. Chat overlay is brought up  |
| 3. User drafts a chat message              | 5. Object is updated with new message and reloaded, visible to all users |
| 4. Click 'Send'                            |  |