# Project Backlog

*Team 9*

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**Problem Statement**

Planning a trip can be difficult and frustrating, and that's the issue that our our service seeks to alleviate that. From finding the best restaurants, suited to your preferences and requirements; to the most comfortable rooms, TripEase will help you with everything without straining your pocket.

**Background Information**

Each year millions of people go on vacation, often planning the trip themselves or online travel agencies. They book flights, reserve hotels, find the best restaurants, or at least try to. The purpose of our application is to ease that process. By producing and individualizing customers needs, our application aims to reduce the time of planning a vacation and spend more time enjoying it.

**Environment**

- Our front end will be built using Javascript, HTML, CSS, and Twitter Bootstrap; so as to have a responsive interface for both desktop and mobile users alike.
- For our backend, a restful service programmed in Python backed by a SQL database, with a focus on modularity for ease of development and testing of individual services.
- SSL will be used for operations with user data and the database will be used with salted hashing to protect users information.
- Our service will also integrate with various existing online travel agencies and online rating sites via their APIs, in order to gather corresponding data and provide our customers with the best value possible.

| Backlog ID | Functional Requirements | Hours |
|---|---|---|
| 0 | As a user, I should be able to register to the service | 1 |
| 1 | As a user, I should be able to select the place I want to visit. | 4 |
| 2 | As a user, I should be able to specify the budget of the trip, and should be suggested with affordable plans | 8 |
| 3 | As a user I should be able to see the top rated restaurants/hotels in that area | 5 |

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| 4 | As a user, I shall be able to see the list of all fun activities and tourist attractions at my place of choice. | 2 |
| 5 | As a user, I want be shown trips based on distance from home and walking distance from points of interest. | 10 |
| 6 | As a user, I want to factor my budget into my trip planning considerations. | 9 |
| 7 | As a user, I want to factor my favorite activities into my trip planning considerations. | 10 |
| 8 | As a user, I should be able to see who all are travelling to the same place and should be grouped together with them. | 7 |
| 9 | As a user, I should be able to communicate with others using an email service. | 4 |
| | **Total:** | **60** |

| **Non-Functional Requirements** |
|---|
| **Performance:** Performance is a concern for the this web application. As our application searches large amounts of review data in order to provide for the best options for our users. We need to make sure our application has sufficient performance to satisfy our users needs. |
| **Security:** Security of data will be a fairly strong concern for this web application. Since we'll be storing user data and sharing it with different hotels, we need to make sure that data is kept securely and there is no chance of theft or misuse of user data. |
| **Usability:** Usability is probably our biggest concern, to goal of this website is to make it easier for traveling users, not more difficult. The user should be able to log in and find restaurants, events, activities, and others to communicate with in an easy to understand and intuitive format. |
| **Reliability:** While this is an important aspect, it is not priority. As our service does not under any time critical pressures, so there aren't extraordinary steps we need to proof the website to 100% uptime. That being said uptime is important for a website, but it definitely not as consequential as it may be for other websites. |
| **Modularity:** Modularity of code will be helpful in testing individual services and help the development by making it easier for team members to contribute and easier to organize. |

**Use Cases**

| *Case Description* | *Response Description* |
|---|---|
| **Case 1: Logging In**<br><br>Open the website and login to your personal account | **S:** Welcome screen of the website will be displayed<br>**A:** User Enters Username and Password<br>**S:** Acess SQL user database to validate User-Display trip page if valid |
| **Case 2: Select a place to visit**<br><br>Update the destination into the system | **S**: A list of locations appear<br>**A**: Select the location you are interested in and click confirm |
| **Case 3: Select a budget range**<br><br>Update the budget range. Provide a maximum and a minimum amount. | **S:** Displays scroll bars to set min and max range<br>**A:** User sets the range so that the options he is shown are in budget and not over-expensive and clicks confirm |
| **Case 4: Update dietary requirements**<br><br>Update dietary requirements in the system, such as allergies, special needs (vegan, gluten free, etc.) | **S:** Displays a list of options in the form of checkboxes<br>**A:** Checks all the applicable options |
| **Case 5: View a list of restaurants**<br><br>All the restaurants which meet the user's needs are displayed as a list | **S:** Displays a list of options of restaurants<br>**A:** User selects a restaurant they wish to visit |
| **Case 6: Select the type of activities you are interested in (e.g. water sports, mountaineering, etc)**<br><br>The user is shown a list of available activities and tourist attractions in his/her chosen destination and is given the option to choose his/her preferences. | **S:** Displays a list of options in the form of checkboxes<br>**A:** User selects applicable preferences and clicks confirm<br>**S:** Adds choices to overall trip database |
| **Case 7: Display hotels based on the distances calculated from places of interests** | **S:** Displays the appropriate list of hotels specified within the user's budget.<br>**A:** User selects a hotel they wish to attend and clicks confirm |

| | |
|---|---|
| All the hotels that are within a feasible distance from the user's places of interest are displayed as a list | **S:** Sends a request for a room in the specified hotel. |
| **Case 8: See other solo travellers travelling to the same place**<br><br>The user will be able to see and match with other people travelling to the same destination. | **S:** Matches travellers with similar interests using an algorithm<br>**A:** User chooses visibility (on/off)<br>**S:** If visibility is on, displays a list of people who are travelling to the same place and have similar interests<br>**A:** User can choose to connect with any person |
| **Case 9: Connect with others using email/chat service**<br><br>Connected users can exchange information and talk to each other using email/chat. | **A:** User selects chat button<br>**S:** Displays group chat and private messaging services<br>**A:** User may type in chat into open groups or private messaging |
| ***TABLE LEGEND***<br>**S: System Responses** **A : Actor/User Actions** | |