Project Backlog - Team 7
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Problem Statement:

Planning vacations can be difficult; booking hotels, finding transportation, and discovering landmarks can be challenging since it usually involves jumping from one specialized travel website to another looking for deals. Planning gets even more complicated when scheduling a trip with multiple destinations with multiple people. Our team plans to develop a web app that simplifies the process of planning and booking a vacation.

Background Information:

Audience:

People across the globe plan vacations throughout the year using various online platforms and services. It's surprising that despite having multiple platforms to book hotels, reserve cars, or find attractions, there are not very many options that allow all three related aspects of a vacation to be organized at one place.

Similar Platforms:

There are several travel management services such as Kayak.com, Hotwire.com, Trivago..com. There services allow users to plan different aspects of vacations such as flights, hotels, and cars, but they all work differently. Kayak.com and hotwire.com allow flight, hotel, and car booking. Trivago.com only allows hotel price comparisons.

Limitations:

Even though these services are all useful, there is no one place to really plan out hotels, transportation, and nearby tourist attractions. Our team wants to create a platform where users can have the convenience to plan everything all together. We also plan to make a user friendly UI which will help cut down the time for planning. We would like to have a platform that is simple and to the point in terms of what can be done, but offers everything a vacation planner would need to plan out their dream vacation. Based off of this, we would like to implement a solution where a user can plan nearly everything related to a vacationing in one place, whether is is booking a hotel, reserving transportation, or finding places to see.

Environment:

As part of our development environment, our web app will be made with HTML/CSS/Bootstrap and Javascript. Our backend will be made of Node.js, Express, etc. For our database we plan to either MongoDB, Firebase, or MySQL and a database management system to store our user information. Our team will use Jenkins to automate testing frameworks.

Functional Requirements:

Backlog ID	Functional Requirements	Hours	Status
1	As a user, I would like to be able to create an account using my Google credentials.	5	Completed in Sprint 1
2	As a user, I would like to be able to login and manage my account using my Google credentials.	4	Completed in Sprint 1
3	As a user, I would like to pin locations on a map in order to specify each location I would like to go.	14	Completed in Sprint 1
4	As a user, I would like to specify coordinates of each location I would like to go.	8	Completed in Sprint 1
5	As a user, I would like to search by name to specify each location I would like to go.	5	Completed in Sprint 1
6	As a user, I would like to have the ability to choose how long to stay at each location.	4	Completed in Sprint 1
7	As a user, I would like to be able to go back and change the locations I have selected.	5	Completed in Sprint 2
8	As a user, I would like to choose my preferred mode of transportation.	2	Completed in Sprint 1
9	As a user, I would like to choose to have a time efficient or cost efficient trip.	20	Completed in Sprint 1
10	As a user, I would like to see the price of my trip categorized into their individual components.	10	Completed in Sprint 1
11	As a user, I would like to be able to name my trips.	2	Completed in Sprint 1
12	As a user, I would like to be able to filter through my past trip history.	6	Completed in Sprint 2
13	As a user, I would like to favorite previous trips.	3	Completed in Sprint 2
14	As a user, I would like to see nearby tourist attractions.	5	Completed in Sprint 2

15	As a user, I would like to specify how many people I am traveling with.	2	Completed in Sprint 2
16	As a user, I would like to be able to share my trips with others.	6	Completed in Sprint 2
17	As a user, I would like to view my trip history.	14	Completed in Sprint 2
18	As a user, I would like to be able to filter my searches.	6	Completed in Sprint 2
19	As a user, I would like to see trip ideas.	5	Completed in Sprint 2
20	As a user, I would like to be able to re-order my trip.	6	Completed in Sprint 2
21	As a user, I would like to be able to update my profile information.	3	Completed in Sprint 2

Non-Functional Requirements:

- Security - Users should not be able to delete other user's travel plans, user identity should remain hidden, secure authentication, and users should not see errors generated directly by any of the APIs.
- Usability - Responsive to user input and make sure during calculations it does not look like the application has frozen, ability to run on most popular browsers (firefox and chrome), make user interface easy to understand and navigate, have user interface be visually appealing. Visual appearance can be broken down into multiple categories: having all elements align vertically and horizontally (when applicable), making sure elements don't move around unexpectedly when interacted with, having elements update information when users interact with them, and making sure that text is easy to read. In addition, searchbars and other buttons should not obstruct the google maps, so they should be placed in areas that are either non-obstructive or only obstruct the edges of a page (i.e. corners).
- Scalability - Multiple users will be able to login to the website simultaneously and, access the features extended by the website without compromising security and performance.

Use Cases:

Case 1: Create an account using Google credentials	
Action: 1. Choose ‘create account’ option 3. Fill out form 5. Submit form	System Response: 2. Account creation form appears 4. Process form 6. Indicate success or failure to user 7. Form disappears
Case 2: Login and manage account using Google credentials	
Action: 1. Click ‘login’ button 3. Fill out form 4. Submit form	System Response: 2. Initiate login process 5. Redirect to root
Case 3: View trip history	
Action: 1. Choose ‘view trip history’ option	System Response: 2. Query user’s trip history 3. Return trip history 4. Show history
Case 4: Filter past trip history	
Action: 1. Click ‘filter’ button in trip history page 3. Select filter option	System Response: 2. Show filter options 4. Query by filter criteria 5. Show results
Case 5: Sort past trip history	
Action: 1. Click ‘sort’ button in trip history page 3. Select sort option	System Response: 2. Show sort options 4. Query by sort criteria 5. Show results
Case 6: Favorite previous trips	
Action: 1. Select ‘Favorite option’	System Response: 2. Add flag to trip in database 3. Indicate that trip has been favorited
Case 7: Start planning a trip	

Action: 1. Click on begin 3. Select starting location on map or input coordinates 5. Submit starting location	System Response: 2. Redirect user to trip planner page 4. Find coordinates on map 6. Indicate that said location has been selected
Case 8: Save a trip	
Action: 1. Click on save	System Response: 2. Save all trip information at current state to the user
Case 9: Cancel a trip	
Action: 1. Click on cancel 3. Confirm to cancel	System Response: 2. Prompt user for confirmation 4. Clear all trip information and redirect user to the homepage
Case 10: Pin locations on a map in order to specify each location I would like to go	
Action: 1. Click on location on a map	System Response: 2. Record location 3. Indicate that said location has been selected
Case 11: Specify coordinates of each location I would like to go	
Action: 1. Select option to specify coordinates 2. Select coordinates 3. Submit coordinates	System Response: 4. Record coordinates 5. Find coordinates on map 6. Indicate that coordinates have been selected a. geocoder errors should not be displayed - display failure modal instead (if needed)
Case 12: Search by name to specify each location I would like to go.	
Action: 1. Click on search bar 2. Enter location name	System Response: 3. Search for places using Google API 4. Return results using Google API
Case 13: Go back and change the locations selected	

Action: 1. Click on back arrow button	System Response: 2. Route back to select locations page 3. Check for previous locations added and add as markers to map 4. Display the map with the added markers
Case 14: Choose how long to stay at each location	
Action: 1. Enter days staying at a location	System Response: 2. Record number of days staying 3. Update UI to show number of days staying
Case 15: Choose my preferred mode of transportation	
Action: 1. Select option to select preferred method of transportation 3. Select preferred method of transportation 4. Submit	System Response: 2. Dialog appears 5. Record response 6. Indicate that response has been recorded 7. Dialog disappears
Case 16: See nearby tourist attractions	
Action: 1. Navigate to ‘tourist attraction’ and enter a search criteria into the search bar (ex. “restaurants”, “tourist attractions”, etc.)	System Response: 2. Send data to google api 3. Display results
Case 17: Specify how many people I am traveling with	
Action: 1. Select option to specify number of people 3. Select the number of people 4. Submit	System Response: 2. Selection dialog appears 5. Record number 6. Dialog disappears
Case 18: Choose between cost efficient or shortest time for transportation	
Action: 1. Choose transportation type 3. Select listing by price or time 4. Submit	System Response: 2. Dialog appears 5. Record response 6. Dialog disappears

Case 19: See the price of a trip categorized into their individual components	
Action: 1. Select ‘plan my vacation’ button in trip form	System Response: 2. Load results page with loading spinners 2. Call trip API 3. Return results based on travel and hotel components of the trip 4. Remove loading spinners and display results and price categorized into travel and hotel components of the trip
Case 20: Share my trips with others	
Action: 1. Selection icon to share trip 3. Enter message and click ‘share trip’	System Response: 2. Use API to bring up message and link to share 4. Trip link is shared
Case 21: Name my trips	
Action: 1. Click on add name field 3. Write name of trip	System Response: 2. Name field is now typeable 4. Record trip name 5. Display trip name
Case 22: See trip ideas	
Action: 1. Select option to see trip ideas	System Response: 2. Query ideas database 3. Return results 4. Show each trip idea result to user
Case 23: Reorder my trip	
Action: 1. Click and drag trip locations on trip form 3. Click ‘plan my vacation’	System Response: 2. Check when user starts and stops dragging items and rearrange items as necessary 3. Save new trip order and call trip API 4. Display trip results in the new order
Case 24: Change profile information	
Action: 1. Click ‘edit profile’ button in profile page 3. Add changes and click ‘save’	System Response: 2. Display form to user 4. Changes are saved to database and display

	the page again with the new changes (if any)