

Team 18 - Product Backlog

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Problem Statement

Traveling the world can be a very fulfilling experience; however, planning the trip itself can be extremely challenging. Enter Wander, a website that provides an all-encompassing solution that simplifies the process of travel planning and ensures quality entertainment along the way. Through the use of personal music preferences and external travel data, our website creates 1) a customized music playlist to enhance the journey from the user's starting point and 2) an itinerary of popular attractions to visit based on a user's destination. While existing applications provide generic travel itineraries, our website eliminates tedious planning and prioritizes the journey, not just the destination.

Background Information

Problem, Domain, and Audience

Regardless of the scale and duration of a trip, the planning phase and journey that precedes the vacation can often be tedious and frustrating. Wander targets users who frequently travel across the world and constantly have to keep track of flight times, travel routes, and tourist destinations before they can even enjoy their getaway. Although the need for a management tool of this nature is great, there still seems to be a lack of software currently available that offers users a simple, intuitive interface that allows them to plan their trip stress-free.

Similar Platforms

Several existing platforms deal with itinerary creation and playlist personalization, but not necessarily both simultaneously. Services like Wanderlog, Pebblar, and Travefy all allow users to

create a personalized itinerary based on a destination location and to collaborate with friends and family in real-time to adjust plans as needed. Other services like StoneSour and Spotify's "Soundtrack Your Ride" tool generate custom playlists based on a user's Spotify history as well as the start and end points of their journey.

Limitations

Though there are existing platforms that offer some of the same features as Wander, their main limitation is that they do not encompass all those features within a single service. Many of the applications described above include either playlist generation or itinerary-making abilities, but incorporating both elements makes Wander unique. In addition, many currently available software can also be overwhelming with the number of features and information they demand up front to create a comprehensive itinerary list. Wander simplifies the user experience by providing an intuitive, clean, and straightforward user interface.

Backlog

Functional Requirements

- 1. As a user, I would like to be able to access Wander on all devices as a website.
- 2. As a user, I would like to be able to register for an account.
- 3. As a user, I would like to be able to log in with my account.
- 4. As a user, I would like to be able to delete my account.
- 5. As a user, I would like to be able to create a profile with a username
- 6. As a user, I would like to be able to modify my username.
- 7. As a user, I would like to be able to add a profile picture to my account.
- 8. As a user, I would like to be able to modify my profile picture.
- 9. As a user, I would like to be able to delete my profile picture.
- 10. As a user, I would like to be able to view a profile page with my profile information.
- 11. As a user, I would like to be able to change my password if needed.
- 12. As a user, I would like to be able to reset my password if needed.
- 13. As a user, I would like to be able to delete my account if needed.

- 14. As a user, I would like to be able to link my Spotify account to my Wander account.
- 15. As a user, I would like to be able to change which Spotify account is linked to Wander.
- 16. As a user, I would like to be able to remove my Spotify account.
- 17. As a user, I would like to be able to take a quiz to determine my music preferences.
- 18. As a user, I would like to be able to retake the guiz for different results.
- 19. As a user, I would like to be able to see my past music preferences (i.e. past answers to quizzes, past results).
- 20. As a user, I would like to be able to reset my quiz history.
- 21. As a user, I would like to be able to toggle on preferences for a playlist (ex. seasonal, genre, mood, location).
- 22. As a user, I would like to be able to get a music playlist for my journey.
- 23. As a user, I would like to be able to see my playlist embedded on the website.
- 24. As a user, I would like to be able to edit my playlist.
- 25. As a user, I would like to be able to export my playlist.
- 26. As a user, I would like to be able to see my current favorite music preferences.
- 27. As a user, I would like to be able to see my past curated playlists.
- 28. As a user, I would like to be able to edit my account information (ex. demographic, music preference, etc.) as needed.
- 29. As a user, I would like to be able to view my listening data (total minutes, genres, artists).
- 30. As a user, I would like to be able to enter a starting location.
- 31. As a user, I would like to be able to edit a starting location.
- 32. As a user, I would like to be able to enter my destination.
- 33. As a user, I would like to be able to edit my destination.
- 34. As a user, I would like to be able to set my travel preference (ex. car, plane) for each trip.
- 35. As a user, I would like to be able to edit my travel preference (ex. car, plane).
- 36. As a user, I would like to be able to get a travel itinerary for my destination.
- 37. As a user, I would like to be able to edit my itinerary.
- 38. As a user, I would like to be able to see the overall map of my travels (i.e. show the map from starting point to destination).
- 39. As a user, I would like to be able to see a smaller map of my itinerary midpoints (i.e. show a map from location A to location B to location C).

- 40. As a user, I would like to be able to have a real-time map to see my current location.
- 41. As a user, I would like to be able to export my itinerary.
- 42. As a user, I would like to be able to see my past travel history.
- 43. As a user, I would like to be able to personalize the appearance of the website (light vs. dark theme, etc.)
- 44. As a user, I would like to be able to hear sound effects from the website.
- 45. As a user, I would like to be able to see animations within the website.
- 46. As a user, I would like to be able to share my non-collaborative playlist within the website with one other user of this website (if time allows).
- 47. As a user, I would like to be able to share my non-collaborative itinerary within the website with one other user of this website (if time allows).
- 48. As a user, I would like to be able to share my non-collaborative playlist within the website with multiple other users of Wander (if time allows).
- 49. As a user, I would like to be able to share my non-collaborative itinerary within the website with multiple other users of Wander (if time allows).
- 50. As a user, I would like to be able to collaborate with a friend to create a playlist (if time allows).
- 51. As a user, I would like to be able to collaborate with a friend to create an itinerary (if time allows).

Non-Functional Requirements

Architecture & Performance

We plan to develop the application with an interlinked frontend and backend, allowing us to check each other's work and ensure that compatibility problems between the frontend and backend don't arise. The backend will be built in Firebase, a Google platform designed for mobile and web applications. Using Firebase allows Wander to be secure, scalable, and debuggable due to its stability and performance analytics feature. In terms of performance, we plan for users to be able to authenticate and log in within 1000ms.

Additionally, the Spotify Web API should allow us to pull specific user data from their current and previous Spotify playlists. With this data, we plan to not only accumulate songs based on their listening history but also recommend new songs that may be similar.

The frontend will be built in ReactJS, a free, open-source library for building user interfaces. We plan to develop a responsive website that will generate user playlists quickly and collate itineraries (each within 60s). We also plan to show locations when users travel with real-time updates (within 2500ms) so users can track their estimated arrival time.

Security

Wander houses real-time and expected future location data of its users. Keeping this sensitive information secure is of utmost importance. Firebase (i.e. our backend) has several measures to ensure security, including custom authentication capabilities. We will implement a system to ensure that only verified Wander users can access our application's features. We will also safeguard a user's data from non-authorized users; users will only be able to view and control itineraries they create or itineraries they are permitted to view and collaborate on.

Usability

As the focus of Wander is to simplify the travel planning process and experience through entertainment and music playlist generation, the interface of the website should also be simple and easy for new users to navigate through and utilize its features without complicating the user experience or planning process. Therefore, we want to ensure that users can plan their trips while generating entertainment as simply and efficiently as possible through a map interface for easy visualizations of trips. Additionally, as Wander is a website focusing on travel, it should also be accessible on more compact devices such as phones or tablets. It should be available on all screen sizes, not only on browsers.

Hosting/Deployment

For this project, we intend the majority of our backend to be supported by Google Firebase and our frontend to be implemented in ReactJS. When we feel adequate progress has been made, we

can quickly launch our website using the Firebase CLI, which satisfies our need for dynamic updates over other hosting services such as GitHub Pages.