Student Name	Date	Date	Number of Hours	Description of Work Done
Simone Lue	1/20/25 9:00 PM	Jan 20, 2025	1	Project Proposal Draft writing - Started the introduction section.
Simone Lue	1/21/25 6:00 PM	Jan 21, 2025	2	Project Proposal writing - Finalizing draft writing -> Proposed Research Project, Project Planning and Timeline, Project Contract - Proposal in Github Repo -> ReportsAndDocuments -> SimoneL_Proposal.pdf
Simone Lue	1/22/25 10:00 AM	Jan 22, 2025	2	Figma initialization, developing wireframes, general idea of screens
Simone Lue	1/22/25 2:00 PM	Jan 22, 2025	1	Wireframe for homepage
Simone Lue	1/24/25 7:30 PM	Jan 24, 2025	1	Wireframing for quiz screens
Simone Lue	1/25/25 12:00 PM	Jan 25, 2025	0.5	Finalized proposal, ready for submission
Simone Lue	1/27/25 7:00 PM	Jan 27, 2025	2	Wireframing screens: interactive maps, chatbot, my trips -> Github Repo -> Misc -> Figma Wireframes.png
Simone Lue	1/31/25 3:12 PM	Jan 31, 2025	3	Research on Reactive Native Expo vs CLI, environment setup and ways to start a project + gluestack v2 ui. Decided on React Native CLI as it was more suitable for the project scope
Simone Lue	2/1/25 9:00 AM	Feb 01, 2025	2	Started and added frontend project shell to github. Encountered issues with the folder structuring when adding to github: Empty folder was being pushed to github instead of with the code. Had to restructure multiple times before successful
Simone Lue	2/6/25 10:00 PM	Feb 06, 2025	1.5	Started on the Quiz Screen component: Adding pressable buttons and sorting out the general layout of the text and buttons
Simone Lue	2/7/25 6:00 PM	Feb 07, 2025	2.5	Completed QuizScreen and the styling file for it. Added: - Back/Next button for navigation between questions. - Back button not visible on the first question - Progress bar to visually represent questions done/left - Color change when button is selected - Have a couple of example questions set as placeholders

Simone Lue	2/8/25 3:00 PM	Feb 08, 2025	2	Started on the layout of the HomeScreen as well as its corresponding styling file.
				 Added:
				 - Search bar (text input)
				 - Horizontal scroll for 'My Trips' (with placeholder trips set + default card for when there are no current trips added)
				
				 Problems encountered:
				 - Had trouble with using Carousel (react-native-snap-carousel)
				   - The dependencies had conflicts and version compatibility issues, specific issues with propTypes
				   - Nothing was working
				 Alternate solution:
				 - Used FlatList with horizontal scrolling instead

Simone Lue	2/8/25 9:00 PM	Feb 08, 2025	2	Started on the bottom navigation menu -> Problem: Tried using external library for icons but icons would not show up properly (Question mark in the middle of a box shows up) - Issues with linking fonts with Xcode Alternate plan: For now I am using emojis as a placeholder icon, will revisit adding external library of icons at a later time Bottom Navigation now has seamless navigation between Home and Quiz screens -> Quiz screen to be replaced at a later time, currently acting as a placeholder for other screens
Simone Lue	2/11/25 11:30 PM	Feb 11, 2025	2.5	Started on the backend for the quiz MVP -> quiz model, schema, api and routing Problem: Had trouble with the database setup/running it on my local machine and connecting to postgresql Solution: After consulting with Russell on the setup, server is able to run on my local device. Next step is to make sure that front end is connecting properly to the back end and able to pass information -> update to local database and make sure it is functioning as intended

Simone Lue	2/13/25 8:00 PM	Feb 13, 2025	3.5	- Built the look for the quiz results on Figma
				- Adding the code and styling for the results display to QuizScreen.js and QuizScreenStyles.js
				  - Will dynamically display the type of traveler depending on the quiz scoring logic from the quiz
				  - Added an "x" button that will take user back to the home page after seeing the results
				
				Problems Encountered:
				- Tried to do a share button functionality where user will be able to save the results as an image to their camera roll. This didn't work out as there were Xcode dependencies that conflicted with my system. Had to remove this functionality. Can revisit once the MVP is complete
				- Dependencies that were added to do this share implementation were not completely erased and repeatedly threw errors as it was still somewhere in the files.
				
				Solutions and Alternatives:
				- Had to remove node modules and reinstall dependencies and pod files multiple times to get rid of the errors.
				
				Next Steps:
				- Send quiz results to the backend and save it to the database
				- Have the option to retake quiz and erase results previous from the backend
				- (Optional once MVP is complete) Retry the share functionality

Simone Lue	2/15/25 1:30 PM	Feb 15, 2025	2	Trying to send data to the backend and save the travel style pertaining to the user - Using AsyncStorage to save and retrieve the user_id upon successful logins Problem: - There were AsyncStorage runtime errors due to it not being properly linked - This was due to Cocoapods gem error -> broken or outdated Ruby gem Solution: - Reinstalled and updated ruby gem - Reinstalled cocoa pods - Reinstalled iOS pods - No runtime errors for AsyncStorage now Trying to retrieve userId from the user's login session - Created a method in QuizScreen.js to retrieve userId - Successfully able to retrieve userid Trying to send quiz results to the backend - Modified api for posting quiz results - Created method in QuizScreen.js to send results to the backend Problem: - 404 Error: api endpoint does not exist or incorrect Next step: Fix the connection to API endpoint

Simone Lue	2/16/25 2:00 PM	Feb 16, 2025	1.5	Fixing the connection to API endpoint - Need to send the quiz results to the back end Problem: - 404 Error: api endpoint does not exist or incorrect Solution: - main.py had "/quiz_results" as the router prefix - quiz_routes.py had "/quiz_results" as the route - To send the results to the quiz_results table, the quiz results endpoint should be `${API_BASE_URL}/quiz_results/quiz_results` instead of '${API_BASE_URL}/quiz_results` - Changed the endpoint to "/" --> proper full endpoint is now `${API_BASE_URL}/quiz_results/` - The results are now stored in the quiz_results table with the correctly retrieved userId and travelStyle When the user redoes the quiz, the results save as a new row in the table rather than updating the existing record - Need to update the record instead of making a new row - Modified POST "/" in quiz_routes.py to check if a result already exists for the user, update it if it exists - Now successfully modifies the record instead of creating a new one Next Steps: - Add frontend option for user to retake quiz. - Fix scoring logic for when users navigate backwards during the quiz. - Users should not be able to move on to the next question without selecting an answer
Simone Lue	2/17/25 12:00 AM	Feb 17, 2025	1	Added frontend option for user to retake quiz: - Added retake quiz button code and styles - Added a method to trigger onPress to handle resetting all scores quiz UI - New quiz results are being sent to backend, updating the user's travel style Next/Submit buttons are 'disabled' without selecting an answer - Added disabled button styling - Modified handleNextQuestion() to prevent moving forward when selectedAnswer is null Next Steps: - Fix scoring logic for when users navigate backwards during the quiz - When nagivating backwards through questions, retain previously selected answer
Simone Lue	2/17/25 4:15 PM	Feb 17, 2025	0.5	Analyzed and summarized survey results to determing high/medium/low priority features for the application.

Simone Lue	2/17/25 4:45 PM	Feb 17, 2025	1.25	Navigating backwards through questions, UI retains the previously selected answer
				- Used an array to track selected answers instead of a single selectedAnswer state
				- Updated handleAnswerSelection to store answers in the new array (which the index corresponds to the question index)
				- Set the selected answer when navigating to the previous question
				- Modify handlePreviousQuestion to retrieve and display the stored selection.
				Problem:
				- Navigating forwards AFTER navigating backwards retains the selected answer previously selected
				Solution:
				- When moving forward after going backwards, clear future selections to ensure past choices aren't remembered.
				Fix scoring logic for when users navigate backwards during the quiz. The current scoring logic does not automatically adjust the previous selection's score when changing an answer. Instead, it only adds points when selecting an option but does not remove points when an answer is changed
				- Modified handleAnswerSelection to first try to subtract points from the answers that are being changed
				Problem:
				- This method of scoring retained the scores from the questions that remained unchanged and added on an additional point for the new selection (whether from the same category or not)
				Solution:
				- Modify handleAnswerSelection to build scores from the remaining selections instead of subtracting points one by one
				- Modify handlePreviousQuestion and handleNextQuestion to reset scores of future selections when moving forward after going back.

Simone Lue	2/20/25 7:00 PM	Feb 20, 2025	2	Implementing personalized recommendations feature
				- Built a FastAPI route (/places/recommendations) to fetch places based on user preferences.

Implementing personalized recommendations feature
- Built a FastAPI route (/places/recommendations) to fetch places based on user preferences.
- Integrated Google Places API to get places based on user travel style (quiz results).
- Stored cached places in PostgreSQL to reduce API calls.
Problem 1: 422 Error (Unprocessable Entity)
- FastAPI expected user_id as an integer, but it was sent as a string.
Solution:
- Ensured user_id is an integer

Problem 2: 404 Error
- FastAPI couldn't find user_id in quiz_results, even though it existed in PostgreSQL
- The backend was using the local database instead of Heroku.
- FastAPI was querying the wrong database (local waypoint_db instead of Heroku).
Solution:
- Connected FastAPI to Heroku Postgres by updating .env database_url

Problem 3: API Route Conflict
- FastAPI treated /recommendations as {place_id}, causing a 400 Bad Request.
- The dynamic route @place_router.get("/{place_id}") was above /recommendations, so FastAPI assumed "recommendations" was a place_id.
Solution:
- Reordered routes in place_routes.py[1] [SEP]
!!Confirmed API is working!!
- FastAPI backend is using Heroku Postgres instead of local PostgreSQL.
- Recommendations API (/places/recommendations) now works as expected.

Simone Lue	2/20/25 9:00 PM	Feb 20, 2025	2	Built Recommended Places screen and styling Connecting frontend UI to make API requests to display the recommendations: - Developed methods to fetch recommendations - Developed filter options - Switched back to local to work on the app Problem: app UI was not displaying results - The frontend was now receiving an empty array upon making requests Solution: - Debugging logs indicated that google places was denying the requests due to invalid api key - Realized Heroku was configured with google places api but not locally - Added API key in .env and was able to retrieve the recommendations which reflected in the UI Next Steps: - Images for the recommended places are not found- need to fix - Refine filters - Make sure recommendations work for all travel styles
Simone Lue	2/21/25 3:00 PM	Feb 21, 2025	2	Fixing the photo display on the recommendations screen - Logs show that the image can not be found - At first, thought it was the API key not being used in the frontend so it was restricting access to images, but upon correcting that, images were still not loading - Adjusted the method for image rendering a couple times and one finally worked (not too sure why) - Images now loading with the recommendations

Simone Lue	2/21/25 5:00 PM	Feb 21, 2025	1	Making sure recommendations work for all travel styles:
				- Matching the different travel styles correctly to TRAVEL_STYLE_MAPPING
				- Had to rename the some of the keys to match the recognized travel styles
				
				Adjusting the displayed emoji for each travel style
				- Tried to do multiple emojis for combined travel styles but it offset the styling
				  - Alternative: Selected one emoji best fit for different combined styles instead
				- Fixed the missing emoji for "No travel style"
				- Fixed the awkward wording for some of the travel styles such as "You are a You didn't align with any specific travel style Traveler"
				  - Modify the return inside QuizScreen.js so that the formatting dynamically adjusts
				
				Next Steps:
				- Recommendations displaying for mixed travel styles
				- Recommendations fetch new results after travel style changes
				- Make sure the filters work

Simone Lue	2/23/25 5:00 PM	Feb 23, 2025	4	Midterm Report: Title page (complete), Introduction (complete), summary of initial proposed project (complete), changes to the proposal (complete), UPDATED project planning and timeline (IN PROGRESS: individual responsibilities; COMPLETED: Gantt chart, new proposed timelines, milestones, deiverables), Implemented Feature (IN PROGRESS: Login, Recommendations, Interactive Maps; COMPLETED: Quiz), Work Logs (IN PROGRESS), Closing and References (IN PROGRESS) Proposal changes: - Gantt Chart - Responbilities - Timelines - MVPs Priority

| Simone Lue | 2/26/25 9:30 AM | Feb 26, 2025 | 2 | Fixing filters
Problem 1: Clicking a filter does not change the UI
- Passing 'places' instead of 'filteredPlaces' in the FlatList filtering logic
Solution: Passed the correct name

Problem 2: Clicking a filter does not show anything (blank page)
- Added debugging logs to check
- Debugging showed that theres a mismatch between frontend filters and backend categories/frontend filtering is based on unmapped categories
- Tried remapping google places categories -> didn't work
Solution:
- Realized the retrieved google places for the current location were not related to any of the filters.
- Changed one of the retrieved places to map from the raw API response category to one of the filter names and confirmed that it works.
- For now, will have random google places categories map to the current applicable filters due to default location being set for recommendations retrieval and none matching the filters (ex. Mapping "museum" -> "spa")
- This filtering is to be integrated with interactive maps and will be changed. |
| Simone Lue | 3/3/25 5:00 PM | Mar 03, 2025 | 1.5 | Combined the Interactive maps screen and the Recommendations screen
- Both components working as intended
- Both filters working separately
Problem: Recommendations don't change with the travel style filter change for the maps
Next Steps:
- Make sure the recommendations pull from the travel style selected
- Have both filters working together |

Simone Lue	3/3/25 8:40 PM	Mar 03, 2025	3	Added OpenAI dependencies
				- Added to the backend for security reasons
				- Since calling from the backend, added chatbot_routes, and updated main.py to include the new router
				Problem: openai version and syntax incompatibility
				- New syntax with the latest openai version
				Solution:
				- Fixed the syntax to match the latest version of openai
				- cURL response confirms api is working
				Added Chatbot Screen and simple styling
				- Able to send request to backend and generate AI response
				Next steps:
				- Style the Chatbot
				- Chat messaging needs to be shown in order
				- Loading visual to indicate the answer is being generated
				- Make refinements to provide tailored information

Simone Lue	3/5/25 2:30 PM	Mar 05, 2025	5.5	Focus: UI Components
				Fixing the Bottom Navigation Icons:
				- Using Ion Icons
				- Previously tried to use depreciated version of IonIcons and had trouble displaying the icon properly
				- Installed latest version of react native vector icons and re-installed pods
				Problem 1:
				- Having the same issue displaying icons: square with '?' In the middle
				Alternative Solution:
				- Switching to FontAwesome6 for icons
				- Following readme for fontawesome6 to carefully install packages
				Problem 2: runtime error, vector icons module not found
				- Lots of errors with dependencies
				- Square icon with '?'
				- Tried to try with fontawesome5
				- Nothing would work
				- Broke the node_modules package
				Solution:
				- Had to revert to original code
				Redoing the TabBar
				- Elevated look to the TabBar
				Problem:
				- Icons were getting cut off
				- Icons and label were shifted upwards and not centered
				Solution:

Simone Lue	3/5/25 11:30 PM	Mar 05, 2025	4.5	Focus: UI Components Adding "More" menu - Small popup animated window when "More" tab is clicked - Used Animation for the window - Unable to navigate yet Blurring the background when the "more" menu is toggled on - Using react-native-community/blur Problem: - After careful and correct installation of dependencies and pods, it showed that the component \<BlurView> was not working Solution: - Manually add blur library to Xcode and rebuilt app Adjusting the "More" menu - Able to toggle blur off and close popup when tapping outside the menu popup - Moved Settings and Profile to the popup navigation - Added InteractiveRecommendations and Chatbot to Bottom Tab Bar Problem 1: Tried to make the tab bar collapsable; screen background became empty Solution: - Using props to pass the hideTabBar and showTabBar methods to every screen Problem 2: Not every screen is scrollable Solution: - Using timeout option instead - Bottom tab times out after 5 seconds of inactivity to hide the screen Problem 3: InteractiveRecommendations flat list does not scroll behind the bottom tab bar Problem 4: Project build broke
Simone Lue	3/6/25 4:00 AM	Mar 06, 2025	1	Retrieved lost progress: Toggling blur, adjusting popup menu, timeout option
Simone Lue	3/7/25 12:00 AM	Mar 07, 2025	1.5	Focus: Chatbot Making the chatbot and user messages send in a normal texting format - Most recent messages on the bottom instead of on top of older messages - Order of the messages are preserved inside setMessages() without overwriting previous updates - Latest messages always appearing at the bottom by using 'inverted' on flatlist Next Steps: - Style the Chatbot - Loading visual to indicate the answer is being generated - Make refinements to provide tailored information

| Simone Lue | 3/7/25 11:30 PM | Mar 07, 2025 | 2.5 | Configuring the AI to provide tailored information
- Added content body to the role of the system (AI)
- Ai is defined as a travel assistant with a default location in Vancouver BC
- Chatbot screen retrieves user's travel style and tailors recommendations to the user's style
Problem: Had trouble sending the travel style to the backend
Solution:
- Retrieved user travel style from from async storage and stored in state variable
- Passed state variable to the backend

Next Steps:
- Style the Chatbot
- Loading visual to indicate the answer is being generated
- (If time permits) Tailor responses with weather information |

| Simone Lue | 3/9/25 12:00 AM | Mar 09, 2025 | 2.5 | Added Chatbot and user avatar
- Indicate Chatbot/user message
- Styled and positioned avatars in desired position
- Adjusted styling for message responses

Styled the text input box
- Changed the styling to a more stylish look
- Send icon instead of text button

Added a customer Header for the Chatbot

Added animated "…" to indicate to users when chatbot is fetching a response
- useState isTyping to track when the bot is processing a response
- Before sending in a request, insert "…" as a placeholder message from the bot
- "Animate" the "…" by cycling through "." ".." "…" every 500ms while isTyping is true
- Remove "…" when the response arrives and replaces with the real message

Tried to retain bottom navigation on profile, settings, and chatbot screens
Problem:
- Navigation is separate from Tab Navigator
- Tried to use separate AppNavigator
- Tried to use hidden Tab Screens
- Could not resolve; will revisit

Next Steps:
- (If time permits) Tailor responses with weather information |

Simone Lue	3/9/25 1:00 PM	Mar 09, 2025	1.5	Problems: - No consistency in navigating between screens (some using Tab Navigation, some using Stack Navigation) - Back swipe is not working on Tab Screens - Bottom Navigation Bar is not showing up on screens in the "More" menu Solution: - Discarded Tab Navigator method - Strictly using Navigation and routes as custom bottom navigation - Changed main stack and app navigator stacks Results: - Consistent navigation - Back swipe working on all screens - Bottom navigation shows up on all screens unless specified - Flat list in InteractiveRecommendations is scrolling due to these changes
Simone Lue	3/9/25 1:00 PM	Mar 09, 2025	1.5	Focus: Navigation No active state on the Bottom Navigation - Adding detection for active screen Problem 1: Incorrect Active Screen Detection - activeRouteName.name === item.name; was incorrect because activeRouteName was already a string, so .name was invalid. - This caused isActive to always be false, meaning no tab was ever marked as active. Solution 1: - Changed const isActive = activeRouteName === item.name; to directly compare the string values Problem 2: Navigation Structure Issue - By using navigation.navigate("Main", { screen: item.name }), the active screen was inside a nested stack. - route.name only gave the top-level screen, so it wasn't detecting the focused tab correctly. Solution 2: - Used navigation.getState() to extract the focused screen inside the "Main" stack Results: - Active state added - Activate state shows label and changes background colour

| Simone Lue | 3/9/25 6:30 PM | Mar 09, 2025 | 1 | Focus: Navigation

Ensure HomeScreen is active on initial load
- Default activeRouteName to "Home" on first load
- Ensure "Home" is highlighted on first load before navigation updates.
- After navigation changes, activeRouteName updates normally.
Problem 1:
- The first useEffect runs before navigation state is fully loaded, so "Home" is not recognized as active.
- Setting active state inside useEffect([navigation, route]) does not immediately reflect the correct screen.
Solution:
- Use useFocusEffect to detect the correct active screen on initial load.
Problem 2:
- Home is recognized as active on initial load but navigating to other screens do not update the active state
Solution:
- use setTimeout() to delay updating active state until navigation completes because navigation and state updates are happening out of sync |
|---|---|---|---|---|
| Simone Lue | 3/10/25 12:00 AM | Mar 10, 2025 | 2 | The filterScrollContainer disappeared once the bottom nav got added back to the screen
Problem:
- Through debugging, found that the Flatlist in InteractiveRecommendations got pushed up and covered the filters
Solution:
- Reduced Flatlist sizing
- reduced minimum height of the scroll container so that it stops scrolling vertically

Changed the splash screen title to WayPoint

Tried adding splash image logo
- Adding and editing in xcode Storyboards
Problem:
- Image will not load
- Image was in the wrong place
Solution:
- Moved image to images.xcassets INSIDE xcode.workspace |

Simone Lue	3/10/25 7:00 PM	Mar 10, 2025	0.5	Limiting Chatbot response - OpenAI generates too many recommendations and suggestions: took too much time to process and text is too long - Limiting chatbot recommendations to 3 suggestions - Added additional prompt to the full system prompt that is sent to openai Added an initial load in message from chatbot - Use setTimeout() inside useEffect() - Introduction message displays after 1 second
Simone Lue	3/10/25 8:30 PM	Mar 10, 2025	3.5	Researching - OpenWeatherMap API calls: Need geographical coordinates (lat, lon) - Direct Geocoding API to get geographical coordinates (lat, lon)- Requires city name, state code, and country code for accurate results of coordinates - react-native-geolocation-service library - Need to request phone's geolocation feature Location Permissions - Creating a screen to allow user to enable location services - Created styling for the LocationPermissions screen - Modify Podfile to set up script for permissions - Add permissions to Podfile Problem: - Podfile was not recognizing RNPermissions/LocationWhenInUse - Throw an error when trying to access permissions Solution: - Modified podfiles and removed RNPermissions/LocationWhenInUse and RNPermissions/LocationAlways to only use RNPermissions - The core RNPermissions pod dynamically manages location permissions Next Steps: - Use retrieved latitude and longitude coordinates to call OpenWeatherMap API

| Simone Lue | 3/12/25 10:30 AM | Mar 12, 2025 | 1 | Using geographical coordinates retrieved to access OpenWeatherMap API
- Changed simulator's location to New West.
- Want:
  - weather.icon
  - weather.main
  - main.temp : Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit
- Verified API call works
- Created weather_routes.py and linked to main.py

Next Steps:
- Complete weather router
- Fetch coordinates for every session and pass to router
- Retrieve openweathermaps api data
- Show details on screen to confirm |
| Simone Lue | 3/13/25 12:00 AM | Mar 13, 2025 | 1 | OpenWeatherMap API
- Completed weather_routes to retrieve temperature, icon, and weather condition
- Set up method in the frontend to pass location coordinates to the backend
- Showing the retrieved information on LocationPermissionsScreen (temporarily) to confirm working API call and to confirm the passing for information from frontend to backend

Restructuring LocationPermissions screen
- Passing location permissions to homescreen
- if location permissions are granted, fetch location to pass to homescreen |

Simone Lue	3/13/25 1:00 AM	Mar 13, 2025	1.25	Restructuring HomeScreen
				- Accept getLocation() as a prop to fetch location
				- Displaying weather information on homscreen instead of in LocationPermissions
				Problem 1:
				- Rendering LocationPermissions screen behind the Homescreen
				- Both screens rendering simultaneously
				Solution:
				- Instead of rendering as a child inside HomeScreen's main view, use conditional full-screen rendering
				Problem 2: Weather information not displaying
				- axios and API_BASE_URL imports missing from HomeScreen
				Solution:
				- Added necessary imports
				Problem 3: LocationPermissions screen loads up on subsequent app launches even when permissions have been granted
				- permissions start off as false and only sets to true when user presses "Allow" on the LocationPermissions screen.
				- The component doesn't know permissions were granted in a previous session until button has been pressed
				Solution:
				- Added useEffect to check permission status of the device on component mount
				Next Steps:
				- LocationPermissions screen won't go away if permissions not granted

| Simone Lue | 3/13/25 7:30 PM | Mar 13, 2025 | 2.5 | Adjusting the weather display in home screen
- Rounding temperature to display no decimals
- Adjusted the layout of the weather box

Adjusting the MoreMenu
- Converted MoreMenu from a separate screen into a Modal Overlay
- Modal overlay is toggled when the more button is pressed which displays over the current view

Styling Modal menu
- Fixing up the UI
- Implementing BlurView to blur background when modal is toggled
Problem:
- BlurView is pushing my modal menu out of position
Solution:
- Tried to put modal menu inside BlurView -> did not work; blurred everything
- Use absolute positioning to place modal menu on top of blurview

Next Steps:
- LocationPermissions screen won't go away if permissions not granted
- Handle denied permissions
- Format chatbot responses
- start Events screen |
| Simone Lue | 3/14/25 11:00 PM | Mar 14, 2025 | 0.5 | Research EventBrite API
Problem: Event search API is no longer available
- Unable to search general events without specific event ID
Alternative Solution:
- Research for different events API
- Found PredictHQ which allowed searching of local events
- Set up token and tested api call on PredictHQ's website

Next Steps:
- Set up Events component (Screens, styles, routes) |

Simone Lue	3/15/25 1:00 PM	Mar 15, 2025	3.5	
				Chatbot Text Input not clearing - Added useRef to manually clear text input after sending message Set up Events Screen - Set up placeholders for how the events screen should look - Added temporary styling Set up Events router - Set events router and connected to main.py - Set GET method for the API - Set params for the API call Set up methods in Events Screen - Using Geolocation to retrieve device's coordinates - Passing coordinates to the router to use the PredictHQ API - Fetching response data Problem: API 401 Unauthorized error - Token refuses to work - Also discovered PredictHQ is a paid subscription after a free trial -> will not be able to use Decision to remove Events MVP following failure to search for a Events search API
Simone Lue	3/17/25 9:15 PM	Mar 17, 2025	0.25	
				Format chatbot responses: - Added Markdown text formatting for chatbot - Styled user message text to allow more contrast for visibility
Simone Lue	3/19/25 6:30 PM	Mar 19, 2025	1	

				Planning and identified the structure for badges MVP:
				- Need to set up Firebase
				  - Retrieve user id from the session
				  - Category of places (Park, bar, museum etc.)
				  - Check in completion ID (UUID) - **DONE**
				  - Coordinates of the location check in
				  - Place_id of the location check in
				  - Time the check in was at
				- Firebase Realtime Database set up with intended structure

Simone Lue	3/19/25 11:30 PM	Mar 19, 2025	2.5	Check In Screen - Uses geolocation to get current coordinates - Send GET request to google places search API with a small radius for precise verification - Return list of the GET request is filtered for categories with "park", "bar" or "museum" - Once check in verification is successful, a UUID is generated + time stamp recorded + user UUID is retrieved from AsyncStorage and sent to Firebase - (Placeholder) Alert to notify check in successful or error matching location - Verified using Stanley park coordinates Problem 1: Using Stanley Park coordinates retrieved Shakespeare Garden INSIDE Stanley Park Next Steps 1/ Solution 1: - Display a list for users to check nearby places and select the correct one Problem 2: Multiple check ins at the same location should not be allowed Next Steps 2/Solution 2: - Same location name/coordinates will not be allowed a second check in
Simone Lue	3/20/25 11:00 PM	Mar 20, 2025	1.5	Displaying a list for users to select a check in location - Fetch location using geolocation on mount and queries google search API to fetch nearby places - Display retrieved places in flatlist - Selecting a place confirms the check in Problem 1: Flatlist showing incorrect name - Flatlist showing the "name" property to be location name (ex. Central Vancouver) instead of the name of the place (ex. Shakespeare Garden) Solution 1: The Flatlist's radius retrieval is too small - Increase radius to 300 Problem 2: Flatlist showing repetitive items with different categories - Shakespeare Garden appears 4 times with categories: park, beach, botanical_garden, hotel Solution 2: Filter data by place_id - One location has one place_id - Filter duplicates in response data so only one instance of each place_id appears Problem 3: Flatlist displaying diverse categories Solution 3: Further filtering - Defined a list of allowed categories (park, museum, bar- the current categories for achievements) - Filter out any places that do not match these categories

Simone Lue	3/21/25 12:30 AM	Mar 21, 2025	0.75	Prevent multiple check ins at the same location - Fetch previously checked-in place_ids for the current user and store in a state variable - If the place has been checked in before, touchable is disabled with a "Checked In" label Problem: Duplicate check ins were still allowed - Realized place_id was not being properly sent to be stored in firebase Solution: Added place_id in firebase properly - confirmed place_id was being added - Previously checked in locations are now disabled
Simone Lue	3/21/25 1:15 AM	Mar 21, 2025	0.25	Separated styling sheet Next Steps: - Fixing the UI of Check In screen
Simone Lue	3/21/25 7:00 PM	Mar 21, 2025	3	Styling Check In screen - Rendered a MapView to show 2 types of markers - 1 Marker for the user's current location - Another set of markers to show nearby locations that match the allowed place categories - Details card on the bottom to show the name of the place and the category (defaulted to nearest fetched place) - Tapping on a place marker sets the details card to show that selected place Problem 1: Marker not showing for nearby places - Asynchronous timing between the user location marker and the fetch locations marker - Tried normalizing data -> did not work - Tried useRef -> did not work - Tried setting initialRegion -> did not work Solution 1: - Render map only after user location and places markers are available - Allows for everything to be loaded in at once

Simone Lue	3/21/25 10:00 PM	Mar 21, 2025	1.25	Default place (closest place) does not have a marker - Tried to introduce a defaultPlace state to store nearest place and set as initial selectedPlace -> did not work - Tried using unique marker keys and fallbacks -> did not work Solution: Removed user location marker and discovered the default place was hiding behind it - Removed user marker as its not important - Added Circle from react-native-maps to show circle centered on user's coordinates Cleanup - Added refresh button to update current user location and nearby places - Extracted logic from useEffect into its own function so it can be called on mount and via manual refresh button
Simone Lue	3/21/25 11:30 PM	Mar 21, 2025	2	Starting the Achievements system - Retrieve checkins by the user from Firebase - Count check ins for each category node - Badges set up with milestones (5/10/20 check ins) Troubles encountered: - incorrect queries to Firebase Next steps/problems: - Categories with no previous check ins are not displayed - Adding badges (images/icons) - Styling
Simone Lue	3/21/25 1:30 PM	Mar 21, 2025	1.75	Categories with no previous check ins are not displayed - Instead of iterating over categories that currently exist in the database, iterate over all categories to make it all show - Do data[category] || {}, which means if data[category] is missing in firebase, we use an empty object instead Separate style sheet - Removed in line styles - Moved all styles into a separate sheet Generate badges - Generate badges for the achievement system that suit the style of the app - Use gemini AI to generate badges Problem: Difficult to generate image exactly how we want it - Have to generate a lot of times to get it close to desired image

Simone Lue	3/21/25 10:30 PM	Mar 21, 2025	1.5	Adding badges - uploaded badge images to the app - return correct badge for each category according to the number of check ins Problem: no badge displayed when the user has not completed the minimum for achievement Solution: need to display something - Showing bronze badge with lower opacity Add progress bar - To show progress to next achievement - Using progress bar - Used getProgress function to calculate a fraction to the next threshold - Displayed under trophy badge Problem: There is an empty gap at the start of the progress bar - Fixing 0 margin -> did not work Solution: - added width={null} to inline styles to let it fill the container
Simone Lue	3/22/25 12:00 AM	Mar 22, 2025	0.75	Generating more trophies - More trophies for categories bar and museum - Added all generated trophies for each achievement level and category to the project assets Displaying new badges - Defined a new trophy mapping object based on achievement category and badge level - Calls getBadgeImage to display the correct trophy image for that category

Simone Lue	3/22/25 12:45 AM	Mar 22, 2025	2.25	Styling Achievements
				- Styled in grid layout
				- Allow flexibility for future category addons -> any addition will wrap automatically
				- Removed card layout -> replaced with grid cell layout
				- Some badge images have a checkered background -> removed
				Adding a modal
				- Add a modal to display the category, current progress, and description of the selected badge item
				- Also displays available tiers of the badges
				- When user taps a badge, the selectedAchievement state is updated and modalVisible is set to true
				- Clicking "X" closes modal and sets modalVisible to false + clears selectedAchievement state
				Problem 1: Progress bar not showing in modal
				Solution 1: removed null width from the progress bar
				Problem 2: Progress is set centered in the bar, leaving unfilled progress at the start and end of the bar
				- React native expects a numeric value for the width of the bar
				Solution 2:
				- Imported Dimensions from react-native library to get screen width
				- Set progress bar width to a % of the screen instead of having a set width (i.e. 200) to ensure consistency across screen sizes
				Problem 3: Progress bar margin is not setting; touching edges of the modal
				Solution 3:
				- Wrapped progress bar in a View
				- Adjusted width based on screen size
				- aligned it in the center
				Next Steps:
				- Confirm all achievements display correctly for each tier
				- Adjust styling
Simone Lue	3/24/25 12:30 AM	Mar 24, 2025	0.5	Adjusting the UI
				- Removed title and progress text on main achievements screen for cleaner look
				- adjusted height of progress bar
				- adding border shadow to achievements title container
				Problem 1: the fill height of the progress bar didnt change
				Solution 1:
				- Adding height property to inline text instead of in style sheet
				Problem 2: shadow applying to container border and text
				Solution 2:
				- separate border into its own View below the text

Simone Lue	3/24/25 1:00 AM	Mar 24, 2025	2.75	Confirm achievements - Checked at 20 parks to verify all badges displaying correctly at every tier Problem: - Museum categories confirmed to not be fetched - No museums are showing up on the marker even in the correct coordinates - The response data has "category" and "types" - "museum" is not under category, but under "types" Tried: - adjusting the filter to check if the types array contains the allowed categories -> did not work Problems found during debugging + priority fixing: - Filtering should show museums and bars - Screen is stuck infinitely on loading if there are no fetched places from the allowed_categories Non-priority next steps: - Want to indicate in modal which tier is selected in the panel at the bottom
Simone Lue	3/24/25 8:55 PM	Mar 24, 2025	1	UI - Added profile picture to more menu modal - Added user name to the more menu modal - Combined both in a profile card - Added an indent style (tried react-native-shadow-2 library but it didn't give desired effect) - Fixed width of the profile card
Simone Lue	3/25/25 12:20 PM	Mar 25, 2025	1	Removing nav bar when on LocationPermissions screen - tried adding it to hiddenScreens array in CustomBottomNavigation -> did not work - tried navigating to location permissions screen separately -> did not work - "lifting the screen"; having a separate stack navigator for MainBottomNav and a separate one for AppNavigator -> did not work - Reverted to old for now

Simone Lue	3/26/2025 9:40:00:00 AM	3/26/2025 9:40:00:00 AM	2	Removing nav bar from LocationPermissions screen - conditionally render either the Location Permissions screen or the Main stack (AppNavigator) based on whether locations permissions has been handled Problem: once the location permission is granted, does not notify the parent navigator that it should transition away from this screen - Found and tried out a solution that worked but changed too many components of the app backbone - Russell was working on a wide range of features that depended on some code that was being changed - Reverted back to old code
Simone Lue	3/26/25 4:00 PM	Mar 26, 2025	2	Problem from before: - category "park" was being displayed but not "bar" or "museum" - only the closest park being retrieved was shown - was stuck on the activity indicator every time no nearby places were being fetched Solution: - Instead of filtering for categories in the front end, added new place route (/cached/filtered) to get places from cached Places table and returns only categories from allowed categories (meant to use for achievements) - Started over MapCheckInScreen and corresponding styles from scratch to ensure: no repetitive and looping logic, new route is used, no unnecessary code from before - Screen fetches from database for nearby places (2000m radius) to ensure there will be at least 1 place pulled New Check In feature: - Screen fetches from database for nearby places (2000m radius) from the user's location - if the place is outside of user's 300m radius, check in is disabled
Simone Lue	3/26/25 6:00 PM	Mar 26, 2025	0.75	Daily 20 pulls from google places API to add to database Problem : Progress bar in achievements modal not displaying the right progress - Set width of the progress bar is cutting off the progress fill Solution - Removed bounds for the width

Simone Lue	3/26/25 8:00 PM	Mar 26, 2025	1.75	UI clean up - More menu clean up - Shifting everything in Homescreen so it looks better on an actual device - Capitalizing category names for display in InteractiveRecommendations and CheckInScreen InteractiveRecommendations map zoom control - Zooming in with gesture makes the map pop back to original view Solution: - Added gesture handling -> did not work - found a restriction for zooming view -> removed it Researching how to retrieve places.photos from google places api - Within free useage - Share findings with russell to discuss
Simone Lue	3/26/25 10:45 PM	Mar 26, 2025	2.5	HomeScreen x Itineraries - Replacing hardcoded trips list with a dynamic API call to retrieve based on user - Store saved itineraries as a state variable - Display itineraries in card view - Itinerary cards display: trip title, trip image, and start date - Placeholder image is used if the itinerary does not have an image associated - Added dark overlay to have enough contrast for white text Problem/Next Steps: - Image from trips not pulling from the trips - Limit to display only 3 trips in carousel - Check if no trips - Option to select "View All" to navigate to Itinerary List
Simone Lue	3/28/25 12:00 AM	Mar 28, 2025	0.25	Pulled from google places search api to add to database

Simone Lue	3/28/25 10:45 AM	Mar 28, 2025	0.5	Limit ScrollView to only display 3 items - Instead of mapping over all itineraries, use slice to show only first 3 Added "View All" - To navigate to ItineraryListScreen to view all trips Problem: Navigation not working Solution: - Screen navigation is wrapped in "Main" have to do navigation.navigate("Main", { screen: "Itinerary" })
Simone Lue	3/28/25 1:00 PM	Mar 28, 2025	3.1	No trips - render a card with the same style as trips card to display "No itineraries" - replaces the default basic text Image from trips not pulling from the trips - Tried: Calling single-itinerary endpoint for each itinerary to get the presigned image URL -> did not work - Tried: Creating separate hook to use in HomeScreen to fetch Itinerary details -> did not work - trip data from aws is undefined in the homescreen - Tried: fetching itineraries directly in homescreen -> did not work
Simone Lue	3/31/25 1:00 AM	Mar 31, 2025	1.25	Displaying both owned itineraries and shared itineraries in homescreen - Fetches and merges itineraries from both shared and owned trips into a single array stored in state - Limits 3 carousel items Problem: Trip image not displaying for Owned trips - Fetching from our API instead of Async - Structure for retrieving image is changed Solution: - Separated fetching - Fetch Owned trips from Async - Fetch Shared trips from backend API
Simone Lue	3/31/25 2:15 AM	Mar 31, 2025	0.25	Displaying shared/personal icon in trips carousel - Added type property to owned and shared trips - show distinctive icons for personal/shared trips based on type

Simone Lue	3/31/25 1:00 PM	Mar 31, 2025	0.75	Achievements sorting logic: - Custom sorting to allow for onboarding trophy first - Completed achievements (>5 check ins) prioritized - Rank and display achievement based on tier (Gold > silver > bronze)
Simone Lue	3/31/25 1:45 PM	Mar 31, 2025	0.15	Small UI adjustments - Found areas where texts had 0 margin - Adding margins to improve UI Map Check in refresh button - Dynamic bottom card kept moving the button out of place - Moved it to absolute position at the top of the screen instead of the bottom so it doesnt get disrupted - Removed "refresh" text and replaced with icon to improve ui experience
Simone Lue	3/31/25 1:55 PM	Mar 31, 2025	2	Friends - New Screen with 3 tabs: search, friends, requests - Search Tab: Uses a TextInput for entering an email address and a button to trigger the search. The search function reads from the /users node in Firebase. If a valid user is found (and it isn't the current user), an "Add Friend" button is displayed which sends a friend request - A realtime listener fetches the current friend list from the /friends/${currentUser.id} node and displays it in a FlatList with an option to remove a friend - A listener is attached to /friend_requests/${currentUser.id} to show pending requests. Accepting adds both users as friends while declining removes the request Problem: Repeat requests allowed Solution: - fetches existing requests by reading the data from the /friend_requests/${foundUser.userId} node using once('value'). This node contains all the pending friend requests for the user - if a request is found, function returns early/stops new request from being sent Display pending - New tab to display pending (outgoing) requests - new state variable outgoingRequests is created, + useEffect hook that listens on /outgoing_friend_requests/${currentUser.id}. This keeps track of all friend requests the current user has sent - In the handleAddFriend function, after sending the friend request to the target user's /friend_requests node, an entry is also created in /outgoing_friend_requests/${currentUser.id} -> ensures the outgoing request appears in the Pending tab

Simone Lue	3/31/25 3:55 PM	Mar 31, 2025	0.5	Problem: Once friend request is accepted, the pending (outgoing from original sender) is not removed Solution: - When a friend request is accepted, add both users to each other's friend lists and then removes the incoming request from the current user's /friend_requests node - Queries for firebase records where the receiverId matches the current user's ID -> If records exist, matching records are removed from the sender's outgoing node Problem: Can add emails that are already in friends list - New check in searchUserByEmail function - checks if the friends state already contains an entry where the friendId matches target user's id - prevents the friend request from being made
Simone Lue	3/31/25 4:25 PM	Mar 31, 2025	1	New PublicProfileScreen - Navigate to this new profile screen when pressing the profile from the friend tab in Friends screen - Uses friendId to fetch that user's public profile from Firebase - Displays public information like profile picture, about section, fun facts, travel behavior and planning habits Adjusting layout for existing friends - Remove display of email - Show Profile picture and name Problem: Friend profile picture not showing in friends list Solution: - (working) public profile screen directly retrieve's the profile picture from /users node using their friendId - Adjust the retrieval in friends list to do the same instead of using a snapshot of the friend's data
Simone Lue	3/31/25 5:25 PM	Mar 31, 2025	0.5	Problem: (previously working) friend's public profile not found - Previous code passed an object to handleViewProfile in order to extract the friend id - Altered code required a string being passed (no extraction needed, just the friendid) Solution: - Updated the handleViewProfile function to accept a friendId string directly

Simone Lue	4/1/25 2:00 AM	Apr 01, 2025	0.75	Consistency in Profile and Public Profile UI - Match styles of both screens Public Profile Information - Extract available data to display - Do not display profile information that has not been added by user - EX. If user's Bio is not filled, do not display in public profile screen
Simone Lue	4/2/25 2:45 PM	Apr 02, 2025	0.8	Problem: Onboarding- "Claim Rewards" button was taking up space even when hidden - Button was conditionally rendered but height was a fixed number, so there was an awkward empty space where the button is supposed to be rendered when checklist is complete Solution: - Wrapped checklist items (and reward button) in a View that uses the onLayout prop + in the callback, update shared value so the Animated.View expands just enough to wrap its children -> did not work - Added a new state variable measuredHeight to store the content's full height - animatedContainerStyle to use measuredHeight instead of a fixed shared value - Added a hidden view (with absolute positioning and opacity 0) that renders the checklist content. Its onLayout callback sets measuredHeight Problem 2: The checklist content is properly wrapped but now the Claim Rewards button does not show when onboarding is complete Solution: - Always render the hidden measurement view (even when measuredHeight is nonzero) - Whenever the checklist content changes (when the reward button appears), the updated height is captured and the animated container expands accordingly

Simone Lue	4/3/25 12:30 AM	Apr 03, 2025	2	Modifying Add Friends screen - Removed the "Pending" route (used for outgoing friend requests) from the TabView - Created one new "Requests" tab that displays both incoming requests and outgoing pending - Switched from FlatLists to a single SectionList- one section for incoming requests and one for outgoing requests - Created an array called sections that only pushes a section into it only if there is data for it (Pending, and requests) - The SectionList uses the dynamically built sections array so that if only one type of request exists, only that section appears - Wrapped the pending request items in a Swipeable to cancel requests UI Clean up - Moved personal/shared trip icon in home screen trip component to the top corner for better visibility - Removed Name display from the more menu - Conditional rendering in public profile to prevent displaying empty About sections - Feature Carousel navigations to corresponding screens Problem: Trouble navigating to itineraries list screen with "Shared" set as active tab Solution - Access the route parameters with useRoute - Checked if route.params.activeTab was equal to 'shared'. If yes, initialized the TabView's index to 1 (selecting the Shared Itineraries tab), otherwise set it to 0
Simone Lue	4/4/25 9:30 PM	Apr 04, 2025	0.5	First user testing: Task based questions
Simone Lue	4/5/25 7:30 PM	Apr 05, 2025	0.5	Started Final Report: Title page + Introduction complete