

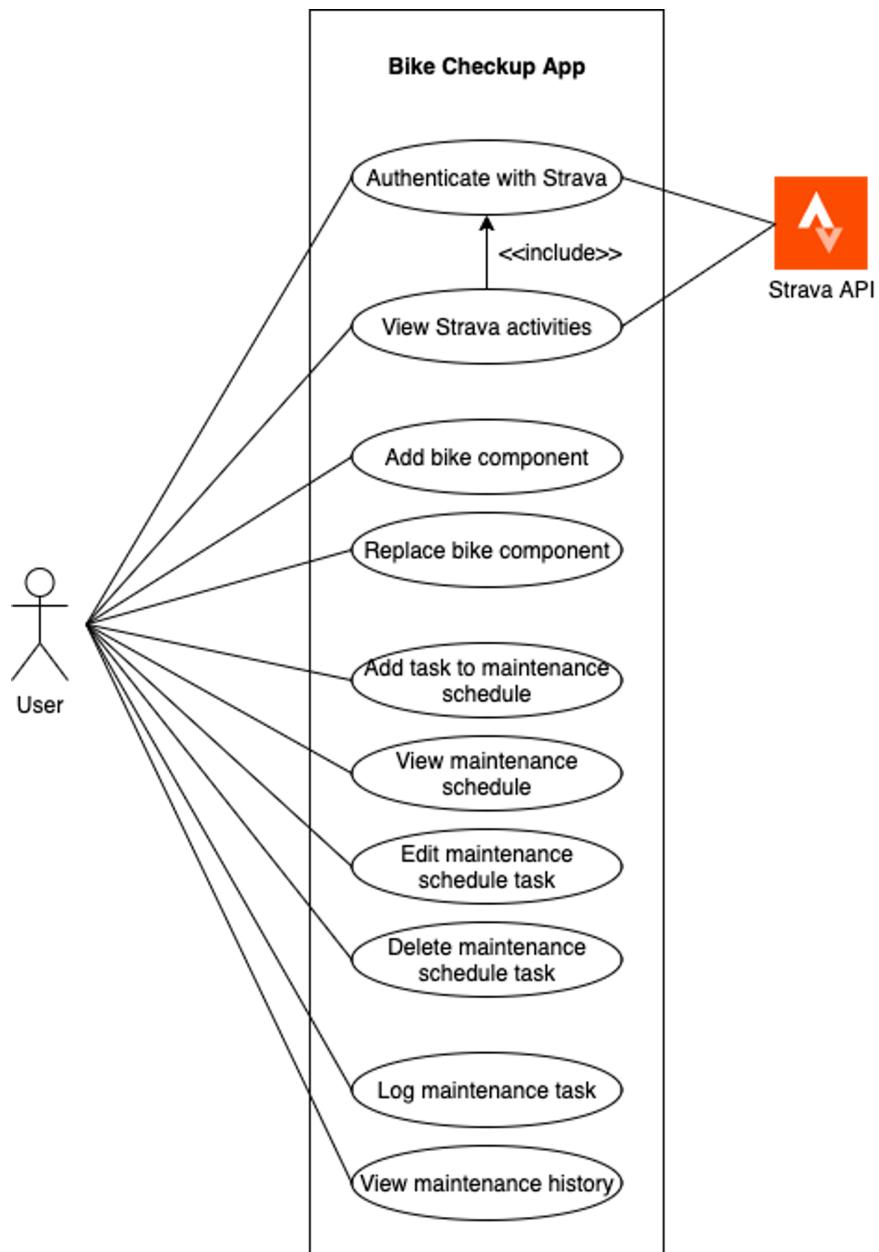
1. Project Description

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Many cyclists are aware of the importance of keeping their bike in good shape for riding. However, without software, it is difficult to keep track of bike/parts usage and time-consuming to update maintenance history lists. Bike Checkup makes these tasks easier by providing cyclists a secure place to keep track of all bikes and their components, as well as create their own bike maintenance schedule.

2. Use-Case Diagram

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3. Non-Functional Requirements

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- Security: App's Strava API "secret" used for authentication is stored in a file that is encrypted prior to being pushed to the source tree.
 - This non-functional requirement is relevant to the Strava authentication use-case of my app, which requires the developer obtain a client secret which "should never be shared".
- Usability: App design takes accessibility into account by having sufficient contrast, acceptable touch target sizing and spacing, and dynamic text sizing capabilities. The targets I will be using for this requirement are outlined in [Material Design's accessibility guidelines](#), namely choosing a color scheme using Material Design's [Color Tool](#) to achieve sufficient contrast, having touch targets be at least 48 x 48 dp in size and separated by at least 8 dp of space, and marking text and their associated containers to be measured in scalable pixels to enable system font size [in an Android app].
 - I believe this non-functional requirement should be essential to any app in order to make it accessible for use by anyone and everyone.

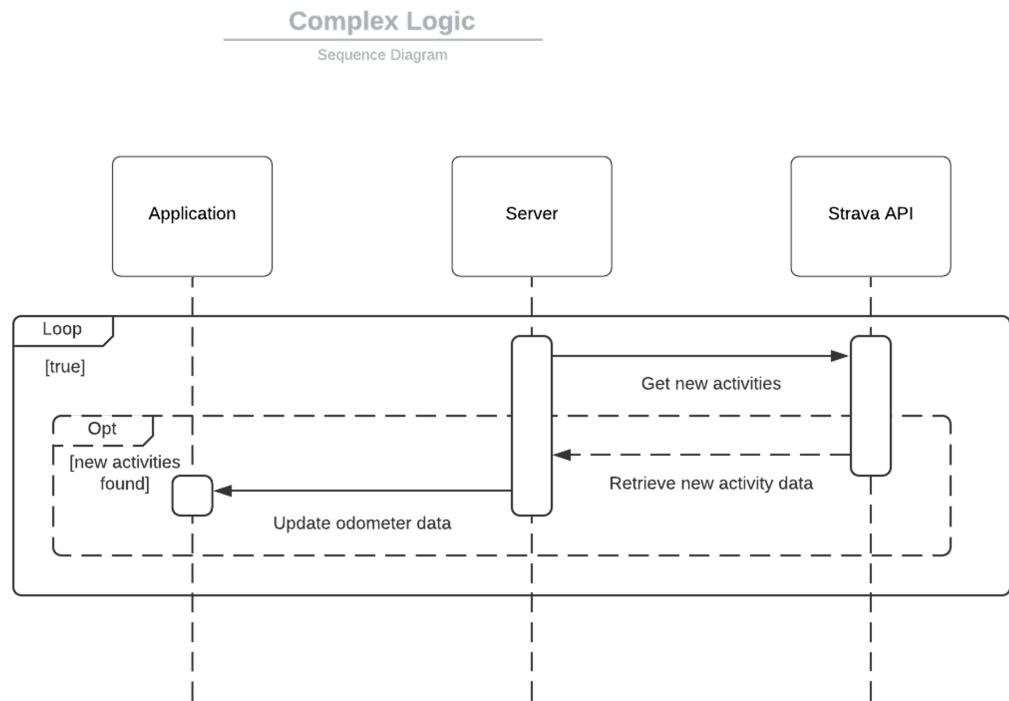
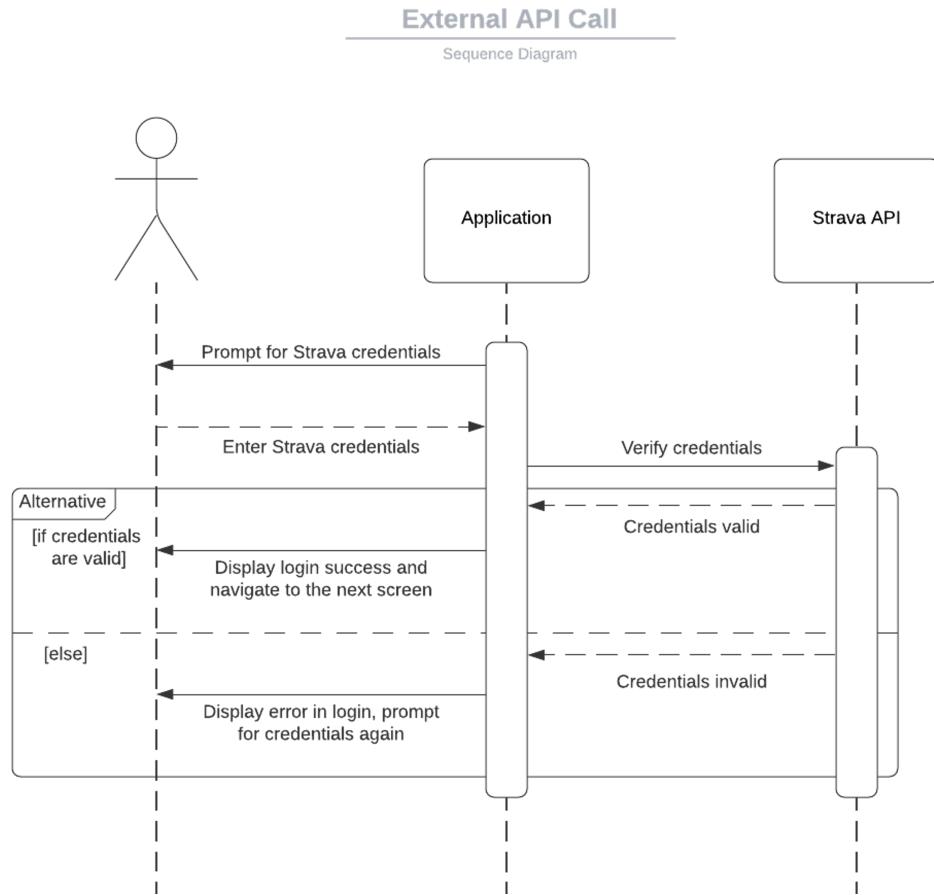
4. Main System Components

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- User Database
 - Will store a backup for each user and their data (including the user's components, maintenance schedule, maintenance history, and Strava information)
- Backend Server
- Frontend Mobile Application
- Strava API

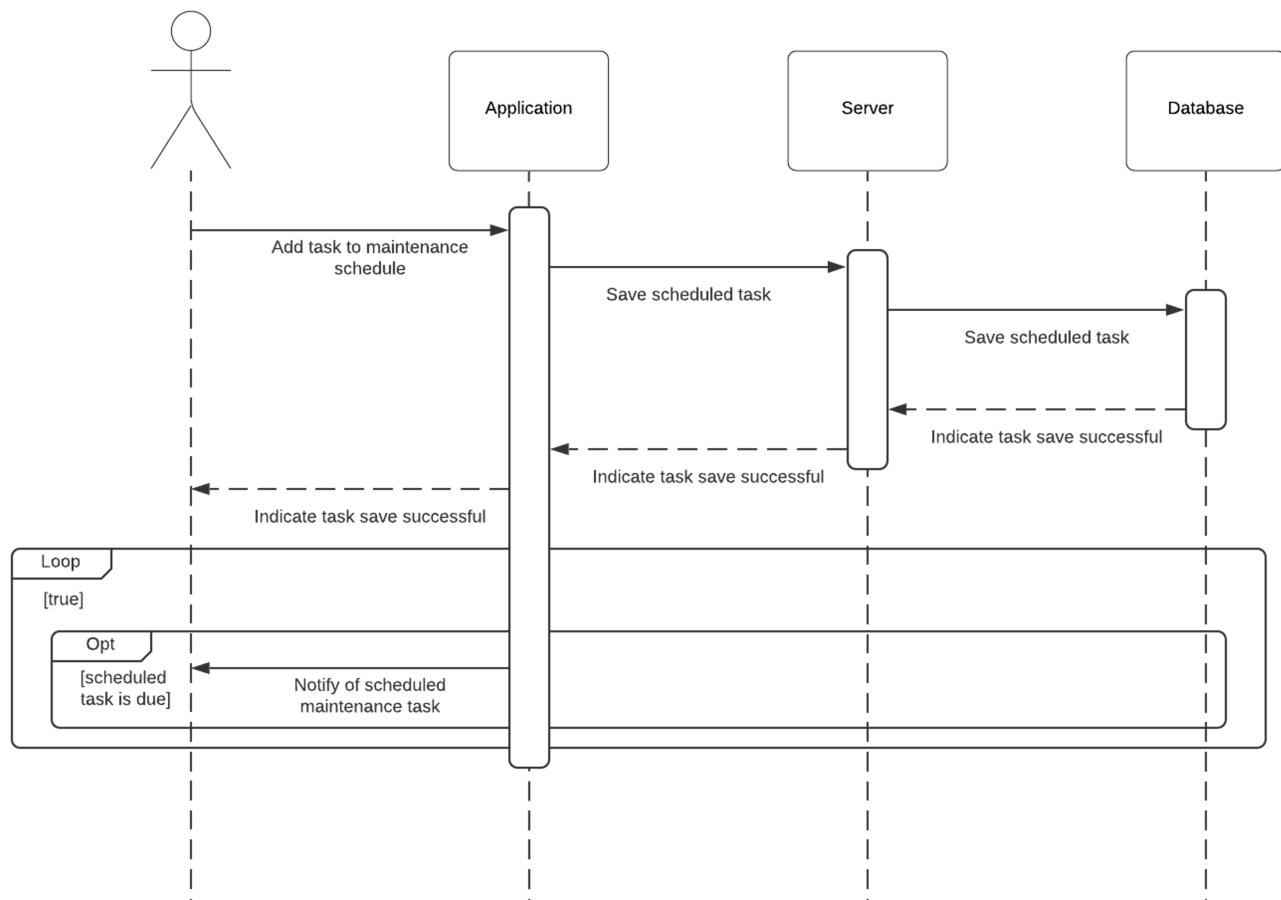
5. Sequence Diagrams

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Live Updates

Sequence Diagram



6. Main App Screen

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Bike Checkup

Oil chain	Monthly	
Pump tires	Weekly	
Check chain wear	Every 6 months	

Maintenance schedule Maintenance history Bikes Activities