

Development Plan

Project Penflower: a Veterinary Application Containing a Drug Calculator and Reference Values for a Broad Range of Species

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Team Task board: <https://app.asana.com/0/1203369303816984/board>

- **Major Project Milestones (bullet lists are fine to use):**
 - Midpoint ("Alpha"):
 - What is the overall project goal for this deliverable?
 - Store drugs in a web database.
 - Manage the database from a web console.
 - View the drugs from a native mobile app.
 - Calculate drug dosages inside mobile application.
 - Search function implemented for drugs and species.
 - What will this look like? What will it do (and not do)?
 - Web admin console hosted on a website (no authentication yet implemented likely.)
 - Web console can add, edit, and remove drugs to global database.
 - Native mobile app will present data from the database. (Local caching for offline access not necessarily implemented)
 - Native mobile app will use a formula for each species to estimate drug dosage
 - What features will it have?
 - Admin controlled, global database located on the web.
 - Native, mobile client application that can show entries from the database.
 - Calculate appropriate drug dosage for individual animal species. This feature is contained in the mobile application
 - Ability to search for specific drugs or animal species.
 - Which major use-cases, user-stories, or requirements will be satisfied?
 - Admin ability to update the list of drugs
 - Veterinarian to view a drug on a mobile device.
 - Veterinarians are able to use a drug dosage calculator to estimate dosages for each animal species.

- Final ("Beta"):
 - What is the overall project goal for this deliverable?
 - Everything from the Alpha.
 - Authentication for user control added.
 - Caching for offline use in the client app.
 - Deployed to publicly accessible address
 - Ability to search for a given drug or animal using the mobile application.
 - What will this look like? What will it do (and not do)?
 - Similar to the Alpha but with user authentication and caching.
 - What features will it have?
 - User authentication and caching.
 - Filter and search functions within the app.
 - Which major use-cases, user-stories, or requirements will be satisfied?
 - A new veterinarian would like to gain access to the application. So the admin grants access through the web console.
 - A veterinarian views the application without phone service, and the application still provides useful and accurate data.

- **Overall Sprint Plan**

- Sprint #1:
 - List the sprint goal. What must you accomplish in each sprint in order to meet both Milestones (above)?
 - Drugs from drug spreadsheet are in a SQL database.
 - A REST API interface is available to interact with the SQL drug database
 - A barebones application that displays drug information taken from the SQL database.
 - List the high-level tasks that must be completed in order to achieve that goal.
 - Create a script to parse the Drug spreadsheet and convert it into entries in RDBMS like Postgres
 - Interface with the RDBMS by creating a REST API using Express.js with Node.js

- Make changes to the current application to enable the integration of items from the SQL database.
- Sprint #2:
 - List the sprint goal. What must you accomplish in each sprint in order to meet both Milestones (above)?
 - Add user authentication to the web app and client app to limit access to only veterinarians.
 - Work on improving the UI so that everything looks presentable and professional.
 - List the high-level tasks that must be completed in order to achieve that goal.
 - Create a User database. Access the user database with a REST API like the drug database.
- Sprint #3:
 - List the sprint goal. What must you accomplish in each sprint in order to meet both Milestones (above)?
 - Deploy the web application onto a publicly accessible address.
 - Potentially deploy the mobile application to app stores for both iOS and Android.
 - Extensively test both the application and web database for any lingering bugs/issues.
 - List the high-level tasks that must be completed in order to achieve that goal.
 - Create an account with VPS provider and upload the web app and provide some routing information.
 - Create a release version of the mobile app and publish to app stores for review.
 - Write unit tests for finding issues with database and app.
 - Have code review sessions with teammates.