Marigold, Team 5 Project Charter

Team Members:
Will Borland, Andrew Bass, Pravin Sivabalan, Devin Sova

Project Title:
Marigold

Problem Statement:
The chemistry behind drugs that people rely on is complicated, and the interactions of medications is difficult to understand without consulting professionals or reading through verbose documentation. People need an easy way to manage their medication on their own, without missing out on vital safety information.

The only solutions on the market allow users to track medication, but only that functionality. There is no analysis of the medication nor does it take into account the user's history, allergies, or biometrics when providing information.

Marigold's approach to managing medication uses the context of the user's background to provide a detailed experience with more consistency and depth. It understands multiple facets of the user, such as allergies and other restrictions, along with biometrics to inform the user.

Project Objectives:
- Allow users to scan in their medication to build a roster of drugs.
- Determine whether additional medications pose any conflict to a user's preexisting medication.
    - "About three out of four older Americans have multiple chronic health conditions, and more than 20 percent of them are being treated with drugs that work at odds with each other"
    - https://nutritionreview.org/2014/03/one-in-five-adults-prescribed-medications-with-conflicting-harmful-effects/
- Remind patients when and how much medication to take.
- Help athletes understand which drugs are legal within various leagues.
    - As reported by the IndyStar, Indianapolis Colts linebacker Robert Mathis was suspended for taking a fertility drug that

was, unbeknownst to him, a prohibited substance. He lost a large portion of his salary.
    - https://www.indystar.com/story/sports/nfl/colts/2014/05/16/indianapolis-colts-robert-mathis-suspended-performance-enhancing-drugs/9187069/
- Help consumers quickly find over-the-counter drugs for particular symptoms.
- Determine if you may be allergic to a new medication based on previously inputted information.
- Determine if current symptoms could be the result of a side effect from one or more of the user's drugs.

Stakeholders:

Users:
Any person who takes medications or vitamins. Users that will especially benefit are those with high medication intake or have stipulations with medication, such as sporting restrictions or allergies.

Developers:
Andrew Bass, Will Borland, Devin Sova, Pravin Sivabalan

Project Manager:
Abid Kaisani

Project Owners:
Andrew Bass, Will Borland, Devin Sova, Pravin Sivabalan

Project Deliverables:
- Frontend web application that lets users manage their own medications, get reminders about taking medication and get information about new medication.
- Backend server that stores and manages user profiles and data and references external APIs to retrieve drug information.
- A separate OCR API that parses medical labels automatically, but allows users to fill in information that is missing or incorrect.