Orant Charities lead an expedition to Malawi, where volunteers (doctors, nurses, and others) provide medical attention to those in need. Orant currently tracks patients using paper forms. However, the living conditions in Malawi as well as traveling back to the United States typically results in a loss of medical records, causing them to be unable to properly generate patient statistics in order to improve the medical care they can provide.

The current system in place makes it difficult to track any type of statistics, pull up any patient’s record on demand and/or allow a nurse, doctor or pharmacist to see if a patient has visited them before.

Object Design

Orant Charities is an organization that connects individuals who have a desire to share their abilities, time, and talents with the needs of the orphaned, the poor, and the vulnerable around the world. Volunteer physicians at Orant Charities are using a paper based system for triaging patients in a mobile clinic that assists at-risk Malawi citizens. While in the field, a patient has 3 different forms associated with this visit. A patient first sees a Triage Nurse who records his/her vitals. The patient then goes to the doctor who prescribes medicine to the patient. Afterward, the patient gets the prescribed medicine distributed to them by the pharmacist.

Current System

As a Cloud App Record Keeper I want to:
- Login and logout of the Cloud Application.
- View Cloud App Users, Mobile Application Users.
- View patient data.
- Create a single medication record.
- View a medication record.
- Search for Cloud App users, Mobile Application Users, Patients and Medication Data.
- Export Patient data in CSV format
- Export Medication list and data in CSV format

As a Cloud App Administrator I want to:
- Have all the feature that a record keeper will have.
- Create Cloud App Users, Mobile Application Users.
- Upload a XLS file with a list of medication

Requirements

System Design

Tests were ran on local environment that mimicked our production server in order to collect realistic metrics. Unit and system testing were performed with tools such as RSpec, with scopes ranging from model validation to confirming dynamic UI behavior.

Implementation

Screenhots

MC-EMR will provide Orant Charities, and possibly others, to:
- Administer medical care without concern for managing paperwork
- Gather statistics on common metrics, such as supply shortages and average wait times for patients
- Improve patient tracking
- Keep history of patient visits and outcomes
- Expedite patient information entry
- Improve rate at which patients are seen
- Streamline record keeping by storing in the cloud

Verification

Acknowledgement

The material presented in this poster is based upon the work supported by Steven Berlenga, Rigoberto Hernandez, Michael Montaque, Sebastian Zanolongo, Steven Luis, Masoud Sadjadi, Juan Caraballo.

I am thankful to the help that I received from my group members, my mentor, and advisor.

Senior Project

Mobile Clinic

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