Project information

1. **Title:** Mobile Dispatch Server – Encounter Task Web View

2. **Location:** Global

3. **Short Project Description:**
   Our project deals with building a user friendly encounter between doctors/workforce and patients in order to develop a healthy environment. We have used Node.js for the backend along with Sails.js on top of it for an MVC web app. We have used Mysql which will be taking scalability into consideration, and frontend will be HTML , CSS , jQuery. The view layers will be integrated into the Django framework. We have built this project keeping into account the development version of MDS so as to facilitate the consistency of models used in database
4. **Project Description:**
   In order to have a successful encounter, there must be healthy "partnership" between concerned authorities. In case of doctor – patient scenario , both patient and doctor must be aware of each other's conditions. Indeed it is a "two way" street. This allows the patient to be actively involved in decision making process and achieve desirable results in a smart way. Many models have been suggested to meet the satisfaction levels of both the ends , but the real question lies on how successful these models have been in achieving good communication between doctors/workforce and patients.

The following are the objectives of Encounter Task Web View:

- To develop a healthy relationship between concerned authorities
- To facilitate in decision making process.
- To be accountable to all necessary details

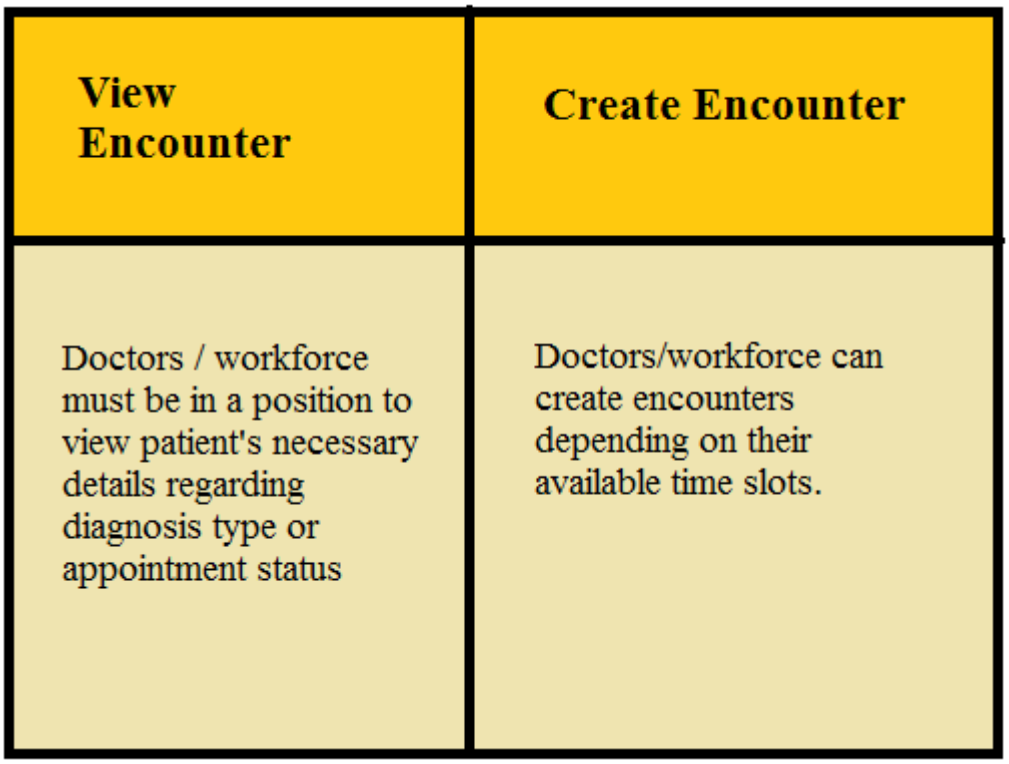
Our objective:

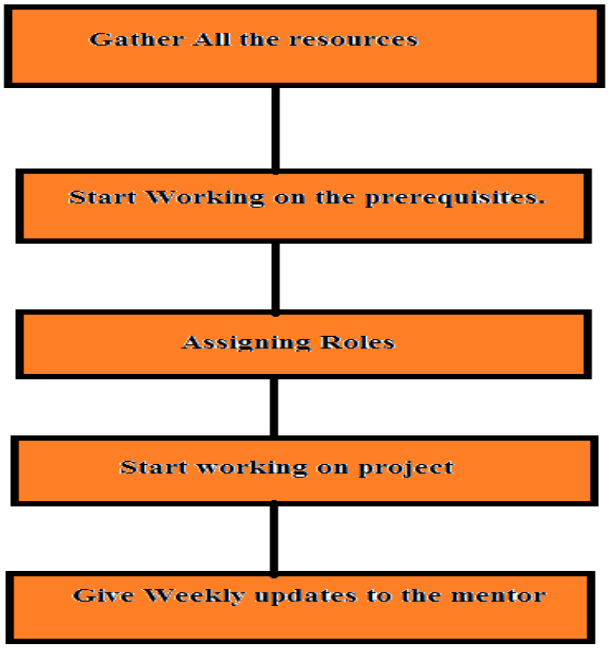
- To build a web interface that displays the encounters between patients and doctors/workforce displaying the status of appointment, diagnosis type along with some user friendly options for doctors/workforce to evaluate the patients list of encounters.

Background:

Patient is registered into system through encounter by surgeon/work force or any concerned authorities including the diagnosis information ,status of appointment and all the required information initiating the basic workflow of Haiti plot. The web interface we are developing requires knowledge of HTML,CSS,jQuery along with some basic knowledge in Node.js and Sails.js for backend system. Our group consists of 4 electronics students , so we tried to learn these languages from day 1 of project announcement and did our best to build the basic model.

Initial Assessment and implementation plan – After clearing the confusion regarding the project , we knew we had to learn HTML,CSS,JS over a short period of time .So we had to set our milestones accordingly to complete the assigned job on time. We were taking long time to completely understand django framework .We thought of developing a basic web interface considering the resources we had. Although we understood the basic framework of templates ,we were not experienced enough to make changes in existing code to achieve the deliverables. Taking into consideration time and our inexperience with the django framework, we decided to complete our work using Node.js under the proper guidance of our mentor, Prof Eric. We kick started our project and were using Mysql which will be taking scalability into consideration, and frontend will be HTML,CSS,jQuery ,Node.js for the backend and Sails.js for an MVC web app. We managed to follow the guidelines provided by our mentor so as to facilitate view layers into Django framework. We have used the same REST API conventions used in MDS for accessing any objects using http CRUD methods and managed to achieve consistency of models used for objects in database with development version of MDS.





Individual Team Member responsibilities – Given the resources we had, there was indeed the need for agile development in order to complete the task in given timeframe. By the end of week 3, we decided to assign roles to each individual team member .On the basis of skill set.we decided to go up with these roles

a. Project lead – Vaibhav , Code Breaker – Anand , Research Analyzer and Code Interpreter – Vishnu Shankar

Given the inexperience we had ,we did stumble at the beginning to get the push in order to move in right direction.Thanks to our mentor,we were able to build the basic model using the resources we learnt over period of four weeks. We had to be good in HTML,CSS to build basic web interfaces. We checked through some of the web interfaces like that of Practice fusion :EHR to build our knowledge on the subject. We developed use case scenarios after every discussion among us and tried to update our previous versions after every meeting indeed made our way to agile development of our project.

b. Reporting progress - Pranav , Unit tester - Akshat are assigned these roles to help us track our progress towards deliverables.

Results and details of work-

Status –We built a basic model with user friendly interface with all the necessary details available for better encounter to take place ,but at the same time we hope to develop this project further in order to add more user friendly features.

Issues And Work remaining – Taking into account the time factor and available resources , we decided to work our project using Node.js and Sails.js instead of Django but we managed to follow the guidelines provided by our mentor in order to facilitate this transition. Our project may have technically ended , but we will continue to develop this model to build our concepts.After we gain sufficient knowledge, we will be planning to develop a Slot based table for patients where patient will be not only be able to choose the time slot , but also will be able to locate the hospitals of their choice using Google Maps, and we are certain that we will do it soon.

Acknowledgment – We would like to thank our mentor Prof Eric , to help us throughout our tussle with the understanding of our project and to all the concerned authorities of SANA to let us be a part of this remarkable initiative.

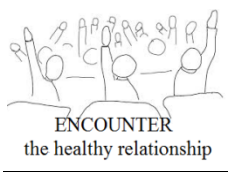
5. **Semester Methods –**

Our mentor for this project was Mr. Eric Winkler. Once we were assigned our revised project objectives and semester deliverables, our team created a project plan that we were determined to follow. The first thing we did is assigned each team member certain responsibilities in order to monitor equal participation and agile development.

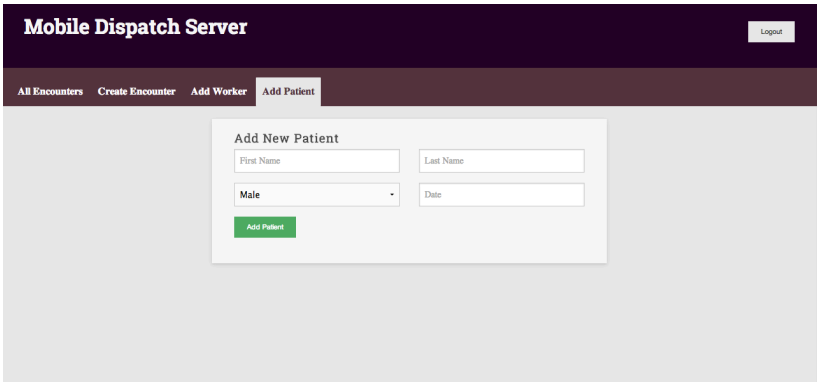
We conducted several team meetings and were in constant communication with our mentors to ensure they were updated on our progress status.

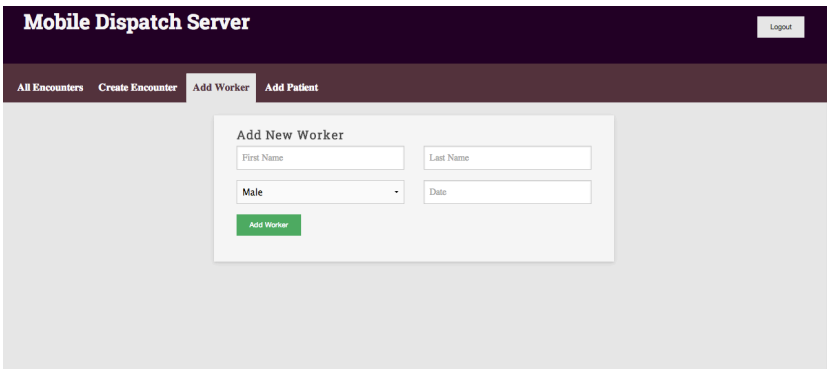
We performed a requirements analysis in order to identify the shortcomings of the existing rudimentary interface in the default Django admin to assign tasks and display past due items. We built a basic model with user friendly interface with all the necessary details available for better encounter to take place, but at the same time we hope to develop this project further in order to add more user friendly features. As suggested by Mr Eric Winkler we analyzed some of the issues that need to be addressed and came up with an initial project plan to cater these issues. We were new to django and tried our hands on Django and Python to build simple web applications but we soon realized that we needed more experience with this framework and considering the time left, we were concerned that we may not be able to complete the deliverables. Since we are more experienced with Node.JS, we developed this project inNode.JS. Considering the fact that this would be a standalone web application, we were confident that we would be able to sync it with the OpenMRS modules that are written in Django/Python. We kick started our project using Node.js for the backend along with Sails.js on top of it for an MVC web app. We used Mysql which takes scalability into consideration, and frontend was HTML, CSS, jQuery.

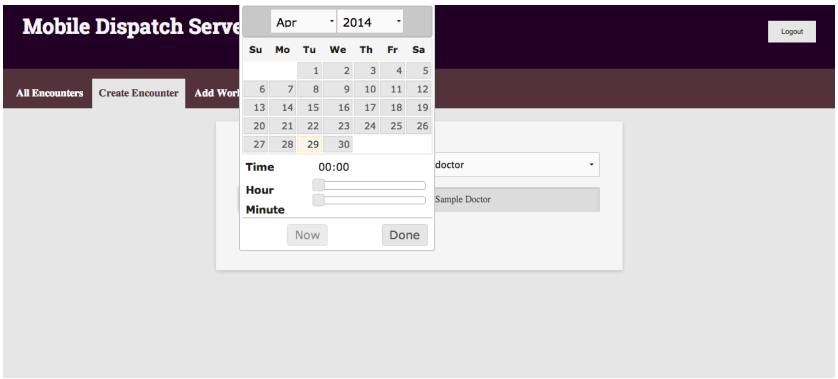
6. **Project Logo:**

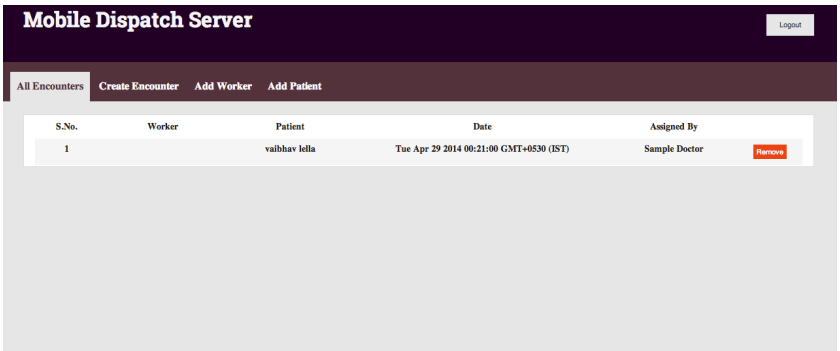


7. **Featured Image:**









8. **Institutional Collaborators:**

- **VIT University:**

  URL: www.vit.ac.in

- **Massachusetts Institute of Technology:**

  URL: web.mit.edu

- **Sana:**

  URL: sana.mit.edu