Project Concept Document

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Project Title	Clinical Rostering
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Description

Hospitals are an essential service running 24/7 and require an adequate number of nurses and physicians to ensure that the best care facilities are provided to all patients. However, it is difficult to provide an efficient and fair schedule for the same manually. The Clinical Rostering project is meant to deal with this problem. This project involves developing a web application which accepts data and constraints regarding the availability of all the nurses and physicians, analyzes the data and, with the help of various scheduling and fairness algorithms, provides the most optimized schedule for the end-users.

Profile of Users

The system would be used by nurses in the hospitals. It can be extended to be used by physicians, pharmacists, dieticians, and other hospital staff. The set of users mentioned have busy schedules thus the interface needs to be easy to use and access, concise and shouldn't take up a lot of time. The UI would be user-friendly keeping in mind that the users might not be very proficient with technology.

Feature highlights

1. The proposed system should consist of a web portal incorporated with secure authentication, through which the users (consisting of hospital staff), can know about their shifts and working hours.

2. The shifts would be designed ensuring fair division on the basis of some fair interval scheduling algorithm.

3. The key features include incorporation of changes in the shifts dynamically in case of emergencies and the fair division of shifts keeping the shift timings and other constraints in mind.

Milestones and Timeline

Milestone	Deliverable?
Create draft requirements	Yes
Finalize Requirements	Yes
Design Approval	Yes
Code Complete	Yes
Testing and Bug Fixes	Yes
First product release	Yes

Usage Model and Diagrams