



IS480 Project Proposal *Clinic Appointment Scheduler*

Team: 4Sight

**Version 2.0
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Team Members:

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Faculty Supervisor:

- Professor Jiang Lingxiao (lxjiang@smu.edu.sg)

Sponsor and/or Clients (if any):

Clearvision Eye Clinic and Lasik Centre

- Anthony Sugiarto (anthony@clearvision.com.sg) – IT Development Officer

Project Overview

Project Description

Our team aims to build a flexible and customizable appointment scheduling web application, catering to the different needs of Clearvision’s clinic branches in one centralized system. Its implementation will replace the manual process of jotting down patients’ appointments on an appointment book, thus increasing productivity and reducing human errors. In this system, the features that are introduced will be the key ingredients to driving business changes in a fast-paced, ever changing healthcare industry. Such features include the creation of new, customizable clinic schedulers that will accompany the growth of Clearvision as they continue to expand in the future. Another feature, the iSchedule, which stands for Intelligent Scheduling will place emphasis on minimizing patients’ waiting time to see a doctor, where the system will study the estimated waiting time for an appointment and make suggestions to help ease patient traffic.

Additionally, the application will be packed with analytics features using predictive modeling for the marketing team to improve on the Return on Investment (ROI) and make better marketing decisions for their many marketing campaigns available. Other analytics features will be used by the clinic staffs and doctors to monitor important statistics such as the improvement in patient’s average waiting time and patient’s satisfaction.

Stakeholders

Sponsor	Clearvision Eye Clinic and Lasik Centre
User	Clinic staffs (clerk, optometrists, nurses) – primary user Admin / IT Officer – primary user Marketing team – secondary user Doctors – secondary user
Advisors/Practitioners/Mentors	Dr. Tony Ho

Deliverables:

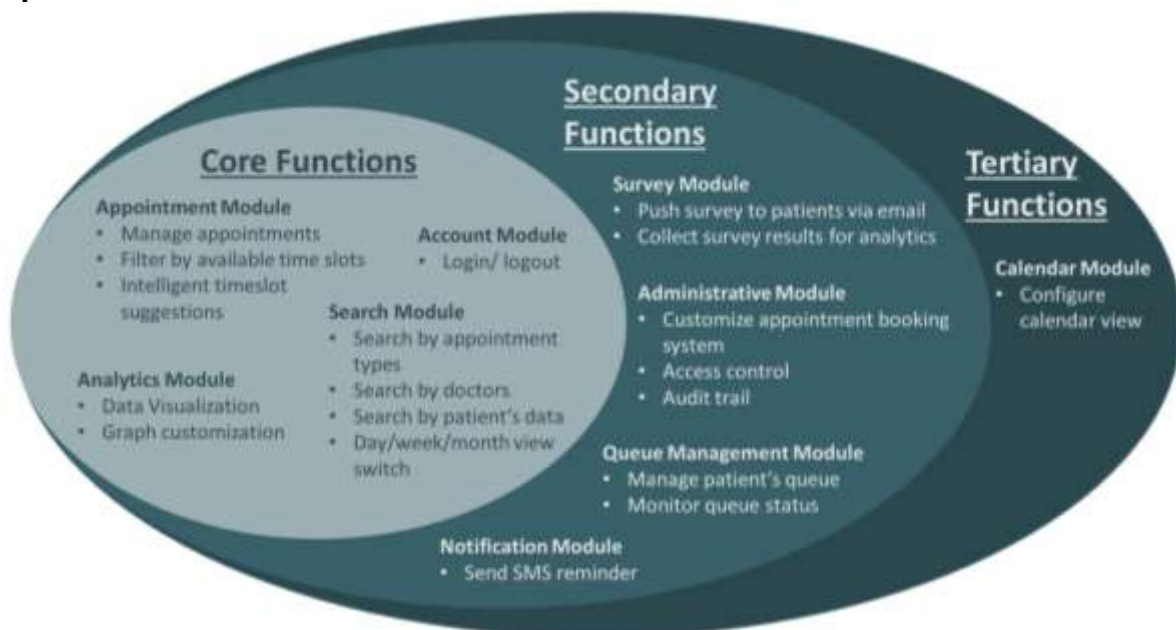
Outcome and value statement

A fully-functional clinic appointment scheduler system with features that help facilitate the scheduling of appointments and improve the visibility of the business process, in turn reaping business value for Clearvision.

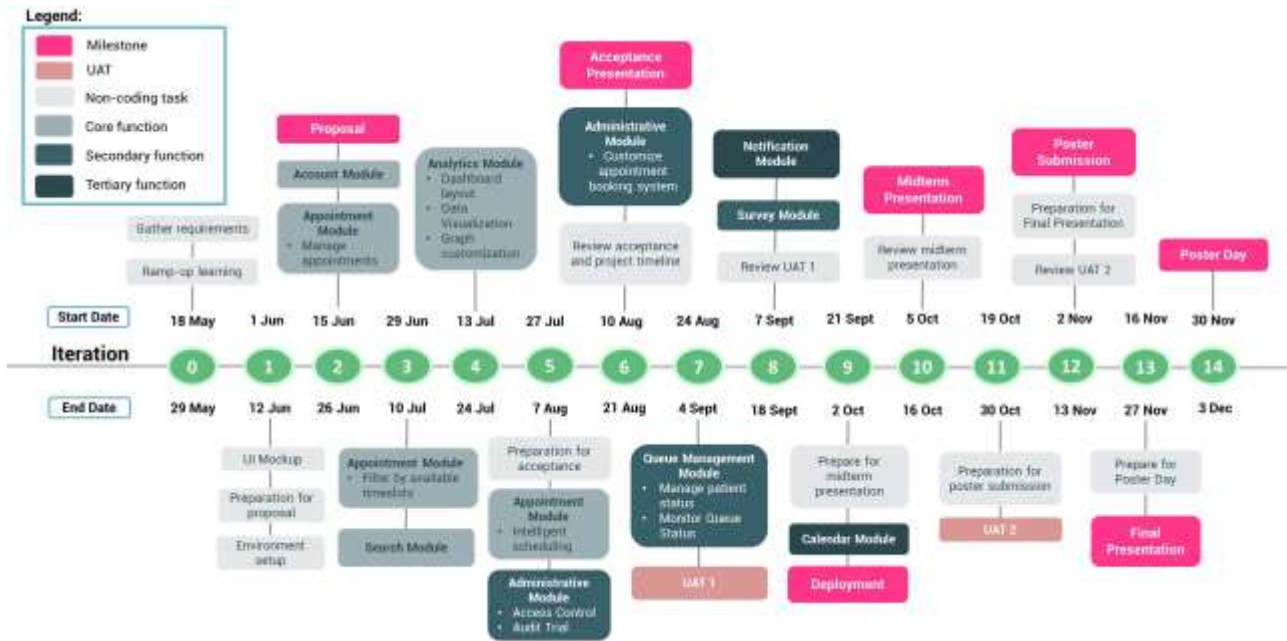
Deployment

The web application will be deployed on Clearvision’s server.

Scope:



Project Plan



Risks:

Risk Statement	Consequence	Mitigation Strategy
Insufficient users to conduct testing	Potential problem of not being able to complete a full User Testing. Data collected might not be accurate due to small user pool	Coordinate in advance with Clearvision stakeholders so that they have ample time to gather relevant users for our User Testing, such as involving nurses and optometrists from other Clearvision clinics.
Team member unable to work due to unforeseen circumstances. Eg: Sick and urgent family matter	<ol style="list-style-type: none"> Project schedule delays Quality of work may be compromised 	<ol style="list-style-type: none"> Ensure that all tasks are always covered by another member of the team when needed. This helps eliminate any dependency on a single member in completing a task. Review plans and make necessary changes where possible. Schedule task assigned to affected member to buffer period, if needed.
Team member is unfamiliar with the new technologies/ languages to be used.	<ol style="list-style-type: none"> Disruption to progress Unduly stress to team member 	<ol style="list-style-type: none"> Team members to pick up skill as soon as possible, preferably before coding task. Lead Developer to coach team member where possible. Conduct group learning and sharing

Resource and reference:

Technologies & Learning Resources:	
AngularJS	Website: http://campus.codeschool.com/courses/shaping-up-with-angular-js/intro Book: "ng-book, The Complete Book on AngularJS"
Django Framework	Website: https://docs.djangoproject.com/en/1.8/intro/tutorial01/ Website: http://www.fullstackpython.com/django.html
Python	Website: https://docs.python.org/2/tutorial/
PostgreSQL	Website: http://www.postgresqltutorial.com/
GitHub	Website: https://guides.github.com/
PyCharm	Website: https://www.jetbrains.com/pycharm/quickstart/django_guide.html
C3.JS	Website: http://c3js.org/reference.html
CalDAV	Website: https://developers.google.com/google-apps/calendar/caldav/v2/guide
Server:	
Clearvision deployment server	
SMS Gateway for push messaging (eg: CommzGate)	