BCCH Project Plan

Team Info
Team Name: Future Star
Team Members: Nick Birtch, Lang Cheng, Jiayao Chen, Kaiti Mok Rong, Alexander Svatukhin, Jiawei Tan, Julie Zhu

Document Information

Revision History

Date	Version	Status	Prepared by	Comments
Jan 21st, 2020	0.01	Initial outline.	Jiayao Chen, Jiawei Tan, Kai Ti Mok Rong, Nick Birtch, Lang Cheng, Alexander Svatukhin, Julie Zhu	Basic format laid out.
Jan 22nd, 2020	0.9	Almost complete	Kai Ti Mok Rong	Included Gantt chart
Jan 22nd, 2020	1.0	Complete	Jiayao Chen	Included start and end dates of each section, added Critical path description and reason
Feb 23rd, 2020	1.1	Feedback Revision	Nick Birtch	Readability, strip technical language, critical path update

Document Control

Role	Name	E-mail	Telephone
Project Manager	Jiayao Chen	raymondyao1997@gmail.com	778-858-2077

Requirements

Requirement Summary, Risk Analyses & Constraints Review:
- Description: Review and analyze the requirements, risks and constraints outlined in the Terms of Reference (ToR).
- Estimated hours: 2 hrs (Start: Jan 9th, End: Jan 14th)
- Requirement: N/A
- Deliverable: N/A
- Accountable entity: All team members

Design

DB Table Design:
- Description: Design database tables and provide visual aids.
- Estimated hours: 2 hrs (Start: Jan 25th, End: Jan 27th)
- Requirement: N/A
- Deliverable: A complete Entity-Relation diagram describing the relations between each patient and their corresponding uploaded data.
- Accountable entity: Jiayao Chen

Tech Decisions:
- Description: Decide internal architectural details of the application.
- Estimated hours: 2 hr (Start: Jan 28th, End: Jan 29th)
- Requirement: N/A
- Deliverable: A fully visualized plan of tech choices (see Design document).
- Accountable entity: All team members

Front End Design:
- Description: Create mockups of user interface, including layouts, fonts, dominant colours and images.
- Estimated hours: 4 hrs (Start: Jan 31st, End: Feb 3rd)
- Requirement: N/A
- Deliverable: Provide mockup design images (see Design document).
- Accountable entity: All team members

Development

Mock Data Preparation.
- Description: Prepare recorded videos, pictures, sample patient data
- Estimated hours: 5 hrs (Start: Jan 27th, End: Jan 27th)
- Requirement: The videos and pictures used must be under 100MB
- Deliverable: N/A (we should add one)
- Accountable entity: All team members

Front End Implementation:
- Description: Implementation of the UI components.
- Estimated hours: 35 hrs (Start: Feb 7th, End: Feb 17th)
- Requirement: N/A
- Deliverable: Front end files renderable in browser
- Accountable entity: All team members

Back End Implementation:
- Description: Implementing business logic and connections to database

- Estimated hours: 40 hrs (Start: Feb 7th, End: Feb 17th)
- Requirement: Performance requirements (see ToR), any further design choices.
- Deliverable: Functioning application logic
- Accountable entity: all team members

Testing

Integration Testing:
- Description: Verify product stability when combining multiple product components.
- Estimated hours: 20 hrs (Start: Feb 12th, End: Feb 21st)
- Requirement: N/A
- Deliverable: A brief Integration Testing report.
- Accountable entity: Lang Cheng

Unit Testing:
- Description: Implement tests for individual components of source code.
- Estimated hours: 30 hrs (Start: Feb 17th, End: Mar 2nd)
- Requirement: N/A
- Deliverable: A reusable, executable unit testing suite.
- Accountable entity: Lang Cheng

Pressure Testing:
- Description: Verify product stability under high loads.
- Estimated hours: 10 hrs (Start: Mar 9th, End: Mar 20th)
- Requirement: Sufficient mock-up data to perform pressure tests.
- Deliverable: A brief Pressure Testing report.
- Accountable entity: Lang Cheng

Release Management

Development Operations
- Description: Configure integration practices for deployments.
- Estimated hours: 10 hrs (Start: Feb 10th, End: Feb 16th)
- Requirement: Azure/AWS subscription.
- Deliverable: Product hosted on public website (link will be provided).
- Accountable entity: Alexander Svatukhin

Maintenance

Bug Fixing:
- Description: Fix critical bugs.

- Estimated hours: 20 hrs (Start: Feb 18th, End: Mar 14th)
- Requirement: N/A
- Deliverable: A fully functional application without impeding issues.
- Accountable entity: all team members

Performance Monitoring:
- Description: Monitor statistics such as response times, API usage, etc.
- Estimated hours: 4 hrs (Start: Mar 9th, End: Mar 13th)
- Requirement: Azure/AWS monitoring services
- Deliverable: An informative performance dashboard.
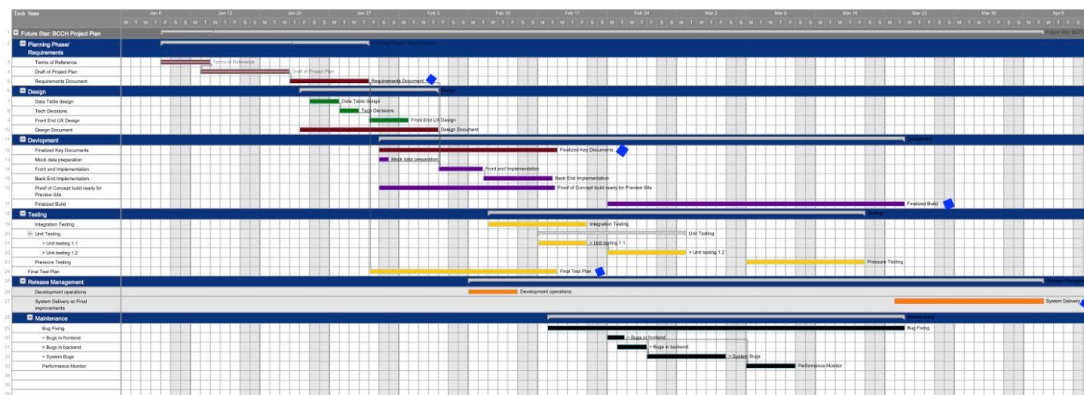- Accountable entity: Alexander Svatukhin

Gantt Chart

https://drive.google.com/file/d/126iVjWcsVWFntF8zEmnJFkJeM3hsxl_p/view?usp=sharing
*Milestones refers to the schedule milestones as per the ToR document.

Project Plan : Future Start BCCH   smartsheet

. Green - Design Elements
. Purple - Development
. Yellow - Testing
.Orange - Release Management
. Black   - Maintenance
. Red   - Documentation
. ---> - depenences/ critical path

. grey bars - Project summary
.   - Milestones

Critical Path

- Reason: It is impossible to develop (Implementation) without a complete set of designs and requirements. We will then need mock-up data to separate front end and back end so that they can be tested and further developed independently. For the test plan, we must first ensure each small component is working as expected, which is done by unit testing. To make sure the whole system works well, we will perform integration testing to ensure product components work well together and further measure the performance using Pressure tests.