Pandemic Pal

Project Plan

Team Explorer (ICBC 10)

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Version 0.1

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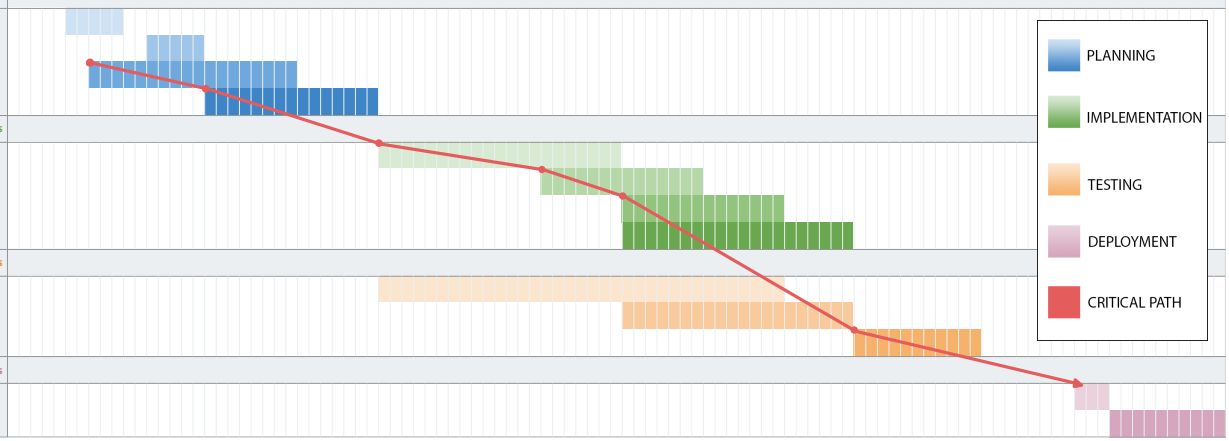
PANDEMIC PAL GANTT CHART

Start Date: 01/11/2021

				WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	WEEK 14	WEEK 15
				Jan 11 - Jan 17	Jan 18 - Jan 24	Jan 25 - Jan 31	Feb 1 - Feb 7	Feb 8 - Feb 14	Feb 15 - Feb 21	Feb 22 - Feb 28	Mar 1 - Mar 7	Mar 8 - Mar 14	Mar 15 - Mar 21	Mar 22 - Mar 28	Mar 29 - Apr 4	Apr 5 - Apr 11	Apr 12 - Apr 18	Apr 19 - Apr 25
PLANNING	**Start**	**Finish**	**Days**															
Terms of Reference	01/16/2021	01/20/2021	5															
Project Planning	01/23/2021	01/27/2021	5															
Requirements Gathering	01/16/2021	02/04/2021	19															
Design Planning	01/28/2021	02/11/2021	14															
IMPLEMENTATION	**Start**	**Finish**	**Days**															
Module 1: Working Location	02/12/2021	03/04/2021	20															
Module 2: Wellness Updates	02/26/2021	03/11/2021	13															
Module 3: Mail Concierge	03/05/2021	03/18/2021	13															
Writing Documentation	03/05/2021	03/24/2021	19															
TESTING	**Start**	**Finish**	**Days**															
Unit Testing	02/12/2021	03/18/2021	34															
System Integration Testing	03/05/2021	03/24/2021	19															
User Acceptance Testing	03/25/2021	04/05/2021	11															
DEPLOYMENT	**Start**	**Finish**	**Days**															
System Delivery	04/13/2021	04/15/2021	2															
Product Support	04/16/2021	04/25/2021	9															



Each section below corresponds uniquely to a unit of work described in the leftmost column of our Gantt chart. Important details regarding a unit of work in the chart will be found below. For the anticipated start and end dates of a particular unit of work, please refer back to the Gantt chart. Comments regarding the estimated amount of time and effort for each unit of work can be found in the appendix at the end of the document.

PLANNING

Terms of Reference (5 days)

- **Task description:** The key role of this high-level document is to introduce the project objectives and any associated risks or costs.
- **Responsible parties:** All team members are equally responsible for this document as it acts as a contract for the whole project

Project Planning (5 days)

- **Task description:** This high-level document identifies the expected components of work for the project and proposes a timeline for completing each one of them.
- **Responsible parties:** All team members are equally responsible for this document, because it serves as a first plan of action.

Requirements Gathering (19 days)

- **Task description:** This subphase is to generate a list of requirements from stakeholders to create a Business Requirement Document. It is to be readable by non-IT personnel.
- **Responsible parties:** All team members are equally responsible for this phase, because it is important that we all understand the project specification and needs of the client.

Design Planning (14 days)

- **Task description:** This subphase is to generate a list of technical requirements necessary to meet the business requirements gathered above
- **Responsible parties:** All team members will be equally involved in this phase, as it is important that we understand what technologies we will be using. Any individual's experience with specific technologies will have a large influence on this phase.

IMPLEMENTATION

Module 1: "Where I'm Working" (20 days)

- **Task description:** Creation of both the frontend and backend of a physical space reservation system referred to as "Module 1" and as

described in the Terms of Reference. We expect this module to take the longest time.

- **Responsible parties:** In anticipation of this module being the most challenging aspect of the project (see appendix for more info), most if not all personnel will initially be working on this, so all persons can contribute and are on the same page

Module 2: "Staying Connected" (13 days)

- **Task description:** Creation of both the frontend and backend of an online social forum referred to as "Module 2" and as described in the Terms of Reference. Anticipated to be less work than module 1.
- **Responsible parties:** As we do not anticipate the full team being required for the whole duration of the task above, extraneous personnel (~4 persons) will be reassigned to Module 2 as Module 1 nears completion

Module 3: "Mail Concierge" (13 days)

- **Task description:** Creation of both the frontend and backend of a remote mail management system referred to as "Module 3" and as described in the Terms of Reference. Also anticipated to be less work than module 1.
- **Responsible parties:** As we also anticipate a partial team to be sufficient for this task, it is to be completed by remaining personnel from Module 1 reassigned after its completion

Writing Documentation (19 days)

- **Task description:** Documentation of code written, to aid in future maintenance and understanding and to be added in retrospect upon completion of implementation.
- **Responsible parties:** Each author will be responsible for contributing to and reviewing documentation of their own code, with additional writing support as needed

<u>TESTING</u>

Unit Testing (34 days)

- Unit tests will be made alongside with the implementation of the system
- This allows us to isolate problems to specific parts of our code, facilitating debugging and ensuring that each piece of code is individually functional

System Integration Testing (SAT) (19 days)

- Test interaction between different parts of code and if they are functioning properly together
- To be tested approaching completion of each module

User Acceptance Testing (UAT) (11 days)

- Test high level requirements as documented in the Terms of Reference
- To be tested the week following completion of all modules

DEPLOYMENT

System Delivery (2 days)

- System delivery will consist of a 3.5 hour project demonstration scheduled for either April 13 or 15.

Product Support (Warranty Period) (9 days)

- A 2 week warranty period will be scheduled after system delivery for any post-delivery product support.

CRITICAL PATH

Requirements Gathering → Design Planning → Implementation → User Acceptance Testing

- Need to gather requirements specified by our sponsor before we can fully complete our Design Plan
    - However, small parts can be designed beforehand as long as we have sufficient information
- At a minimum, a high level idea of how we want to design the system is required before we start coding
- All implementation needs to be completed before User Acceptance Testing can begin

Different implementation modules do not depend on one another

- Modules 1, 2 and 3 do not depend on one another and can be worked on in parallel once we have the resources to do so

ROLES (PRIMARY : P / SECONDARY : S):

- **Front End:**
    - Michael Zhang (P)
    - Sylvester Chenne (P)
    - TaeGyun Lim (P)
    - Nicholas Pun (S)
- **Back End**
    - David Huang (P)
    - Nicholas Pun (P)
    - Ray Zhang (P)
    - Felix Law (S)
    - Michael Zhang (S)
- **Database**
    - Felix Law (P)

- Sohan Mathew (P)
- Ray Zhang (S)
- TaeGyun Lim (S)
- Sylvester Chenne (S)

Please see the next page for the appendix

APPENDIX

Comments on Estimated Duration/Effort For Each Unit Of Work

Planning:

Terms of Reference: This document can be completed very quickly because it is a general, non-technical introduction to the project.

Project Planning: This is a non-technical document and thus the time/effort required to publish an initial draft is comparable to the Terms of Reference. However, it may be revised several times throughout the semester, as changes to workflow occur.

Requirements Gathering: Understanding the essential project requirements can start as soon as the first week of the semester. We anticipate understanding over 80% of the project details after our first sponsor meeting and the Requirements deadline. Thus the effort required for this phase should peak around this time.

Design Planning: This phase will require a larger amount of effort during the period between our first sponsor meeting and the Design deadline. We anticipate spending this time to research, test and discuss technologies

Implementation:

Module 1: This module is expected to take the most time out of all three modules. We expect the implementation of reserving a workplace to be very complicated and the most integral part of this project itself, thus we are dedicating approximately 3 weeks to it. The first two weeks will have our whole team working on it to ensure we can build up the foundation of the system quickly.

Module 2: Module 2 is expected to take less time than module 1, but more than module 3. We expect the implementation of both the frontend and backend of an online social forum to be easier than the implementation of reserving a workplace, and therefore we will partition our team to work between completing module 1 and starting module 2 and 3. Therefore, we are dedicating approximately two weeks to complete the module.

Module 3: This module is expected to take the least time out of the three modules we have partitioned this project into. The design part of this module appears to pose the least challenge, and we expect comparatively low work necessary to meet requirements as set out. By this point, each member of the team will have also spent

significant time developing for previous modules, and the technology stack should be set in stone. For this task we are also allocating approximately two weeks.

Testing:

Unit Testing: This phase will last throughout all implementation phases as we should be writing test cases for our code as we go to ensure functionality of each individual piece of code. Unit tests should be handled by whoever wrote the piece of code.

System Integration Testing (SAT): This phase will begin once Module 2 has reached half way in terms of completion. With Module 1 complete and Module 2 semi-complete, we should have sufficient code to test if different pieces of code are functioning properly together. This phase will last until approximately one week after Module 3 is complete, which is when we can start testing the interactions of all our modules together.

User Acceptance Testing (UAT): This phase will begin once all SAT is complete. With confirmation that our system works as a whole, we can start testing if our system fulfills the need of the users based on the requirements we have gathered. As we have most things already tested and debugged, this phase will most likely only last a week to tie up loose ends and to make sure our system fits the required use cases.

Deployment:

System Delivery: Project demonstration will take no longer than 3.5 hours but its scheduled date is either on April 13 or 15, thus the chart reflects the full range of time during which the demonstration may take place.

Product Support: 2 weeks should provide an adequate amount of time for major questions to be answered and bugs to be fixed after delivery of the system.