

## Project Plan and Estimate

### Introduction

My application is a Covid-19 Tracker for businesses to be able to handle all of their new needs surrounding employees. It will provide the ability for Human Resources Departments to be able to track their businesses' vaccine/quarantine compliance requirements in real time and to update them as necessary. It will also be able to provide reports regarding vaccine/quarantine compliance requirements for the businesses' analytics needs.

My overall development strategy will be to follow the agile methods I have come to know through IST 261 and IST 311. I will start by designing all of my model classes that I think will be required for the application. I will then begin to design and build my view and control classes. During the construction of my view and controller classes I will add tests, methods, and make modifications to my model classes as necessary. After the application is functional to that point, I will begin to develop the query reporting features and persistent memory required to support them. Once the application is able to function and keep information persistent between runs, I will begin to prepare it for deployment. That functional deployment is the end goal of my application.

If I complete my estimated sprints ahead of schedule, I will begin learning how to connect my application to a database and how to provide adequate security to the application, so that it could actually be used by businesses without raising any legal concerns.

### User Stories

User Story #	User Story
1	A Human Resources (HR) employee can input the vaccination records of the employees in their business. Many businesses require that employees be vaccinated for covid-19 to maintain their position. When inputted in to the application, these records will be available via both solo and group inquiries.
2	An HR employee can update the business' new quarantine mandate requirements in to the application, and put any employee in quarantine in line with their exposure policy. The application will then keep track of all employees currently in quarantine and when they will be able to return to work.
3	An HR employee will be able to provide lists of which employees are awaiting their Nth booster vaccination or how many quarantine days the business has afforded to all of its workers through query options in the application.

### Product Backlog

Backlog #	User Story #	Backlog Item Description
1	1	Input individual employee vaccination records

2	2	Update quarantine time requirements
3	2	Change employee status to “in” or “out” of quarantine
4	2	Provide employee quarantine completion date
5	3	Query a list of all employee vaccination records
6	3	Query a list of who has been in quarantine and how many days were taken for quarantines in total

## Project Sprints

Sprint #1: from <February 6> to <February 13>					
Backlog #	Task Description	Story Point Estimate	Story Point Actual	Status*	Comments
1	Design Tests for Model Classes	3		Not-Started	Test-Driven Development Methods
1	Design Model Classes	3		Not-Started	
1	Create Model Classes	3		Not-Started	
1	Test Model Classes	1		Not-Started	

Sprint #2: from <February 14> to <February 27>					
Backlog #	Task Description	Story Point Estimate	Story Point Actual	Status*	Comments
1	Design Login Graphical User Interface (GUI)	2		Not-Started	
1	Create Login GUI View Class	2		Not-Started	
1	Create Login GUI Control Class	2		Not-Started	
1	Test Login GUI	1		Not-Started	
1	Create Users	1		Not-Started	
1	Test Users/Login Capabilities	2		Not-Started	

Sprint #3: from < February 28> to <March 20>					
Backlog #	Task Description	Story Point Estimate	Story Point Actual	Status*	Comments
1	Design Main Menu GUI	2		Not-Started	
1	Create Main Menu GUI	2		Not-Started	
1	Test Main Menu GUI	2		Not-Started	
1	Design add Employee feature	2		Not-Started	

1	Create add Employee feature	2		Not-Started	
1	Test add Employee feature	1		Not-Started	

Sprint #4: from <March 21> to <April 3>					
Backlog #	Task Description	Story Point Estimate	Story Point Actual	Status*	Comments
1/5	Design add Vaccination to Employee feature	2		Not-Started	
1/5	Create add Vaccination to Employee feature	2		Not-Started	
1/5	Test add Vaccination to Employee feature	1		Not-Started	
2/3/4/6	Design Employee Quarantine features	2		Not-Started	
2/3/4/6	Create Employee Quarantine features	2		Not-Started	
2/3/4/6	Test Employee Quarantine Features	1		Not-Started	

Sprint #5 (FINAL): from <April 4> to <April 24>					
Backlog #	Task Description	Story Point Estimate	Story Point Actual	Status*	Comments
4/5/6	Design persistent memory and query features	3		Not-Started	
4/5/6	Create persistent memory and query features	3		Not-Started	
4/5/6	Test persistent memory and query features	1		Not-Started	
1-6	Test complete design and prepare application for deployment	3		Not-Started	