Project Proposal

Medical Billing System
"BillSyncEase"

1. Executive Summary

   For our project, we aim to create a functional prototype of a medical billing system. Such a system would allow both patients and providers to submit an insurance claim for the healthcare provided.

2. Project Overview

   The main objective of our project is to create a medical billing system that is easy for users to navigate, and that alleviates some of the stress that comes with health insurance claims. Though we do have universal healthcare in Canada, insurance is still a very important part of our system and can be complicated not only for patients to navigate but for providers as well. An internet platform like the one we intend to develop would make it easier for healthcare providers to direct bill insurance companies, and for patients to individually submit claims. By the end of the project, we expect to have a functional prototype of such a platform, including the structure of all desired features.

3. Stakeholder Analysis

   The stakeholders for such a platform would be the sponsor, health care providers, patients, and insurance companies. Providers would expect a simple yet effective system that allows them to select the patient treated, what kind of care was given, when it was given, and what the cost would be. Patients would expect an easy access platform where the process of submitting a claim is clear and understandable. This includes being able to select the type of care received, the provider, the date, and how much is owed for treatment.

4. Agile Methodology Selection

   The methodology that we have chosen for our project is the Scrum method. This method allows for flexibility in development as the project evolves. The fields of healthcare and technology are constantly changing, so a methodology that allows us to adapt to such changes in real-time is a requirement. Being able to divide the project into manageable components and integrate them at the end will ensure that each piece is as functional as possible. These assets of the Scrum methodology are what make it a great fit for the project.

5. Project Scope

   The core functionalities of a medical billing system are patient registration, claim submission, and medical history tracking. These are the basic requirements for our system. Features of our system include tracking previous claims, viewing the status of a claim, and making payments. We intend to deliver a functioning prototype of a

medical system, with the functionalities and features listed above at least semi-operational. For us, one of our biggest constraints will be time. Since we are all students, much of our final product will depend on what can realistically be completed in the time that we have. Another constraint will be resources. As our respective degrees are still in progress, we do not yet possess all the knowledge needed to make an intricate, extensive system. However, we all have experience in several computer science courses, and intend to develop our project to the best of our abilities.

6. Project Team and Roles
   Product Owner/Scrum Master: Gurkaran
   - Responsible for product backlog and making sure the team is working on items that are high priority.
   - Ensure team is following Scrum methodology.
   - Oversee development stages, provide ongoing feedback.
   - Create user story.
   Developer: Sarah, Aadee
   - Create the app.
   - Gather information from reliable sources.
   - Execute sprints.
   UI/UX Designer: Shubhdeep, Hannah
   - Design the visuals of the application based on user needs.
   - Create wireframe, mockups, and prototypes.
   Project Sponsor:
   - Define project's objectives.
   - Provide ongoing support and guidance to the project team.

7. Timeline and Sprints
   The project's expected duration is eight weeks, beginning January 29, 2023.
   There will be four sprints that will each be two weeks long.
   Sprint 1: review product requirements, create product backlog, user story delegate tasks.
   Sprint 2: develop wireframes, core functionalities, login, username, and password to result in a basic but functional app.
   Sprint 3: design and develop prototypes, testing, gather feedback, adjust.
   Sprint 4: complete application and final report

8. Product Backlog
   Planned: The product backlog, overseen by the Scrum Master/Product Owner, will be a dynamic list prioritising tasks for developers and the UI/UX designer.
   Systematic Approach: User stories and requirements will be categorized as high, medium, or low priority, allowing for the app's core functionalities to be accessible to users after each sprint.

9. Sprint Planning and Execution
   Planned: High-priority tasks from the product backlog will be assigned to the first sprint, with any incomplete tasks carrying over to subsequent sprints.

Systematic Approach: This approach ensures the progressive development of the app's core features, maintaining a focus on priority tasks for efficient sprint execution.

10. <u>Daily Stand-ups</u>
    Planned: Stand-up meetings will occur twice a week on Discord (Tuesdays and Thursdays) to monitor progress and offer suggestions.
    Systematic Approach: These meetings serve as a regular forum for progress updates and collaborative problem-solving, enhancing communication and coordination among team members.

11. <u>Retrospectives and Continuous Improvement</u>
    Sprint retrospectives will be conducted on Discord, at the end of each sprint. It will be led by the scrum master and developer.
    Planned: Feedback, lessons, and suggestions from stand-up meetings and sprints will be actively considered for process improvement.
    Systematic Approach: Emphasising a culture of continuous improvement, this approach ensures that insights gained during the project contribute to refining processes and optimising project delivery.

Proposal Approval and Signature
By signing this document, you agree to sponsor this project proposal for the development of the medical billing system application, BillSyncEase.

Signature: _____   Date: _____