

Continuous Grade Point Tracker

Introduction

One of the most dominant determinants of success is the ability to track performance. Sports is an excellent example of such, for not in any field is performance tracked so closely. The Continuous Grade Point Tracker seeks to bring such enthusiasm for tracking performance into academia. Not only will the CGP act as a key performance indicator (KPI) in academics but also equip scholars with a tool to track their academic performance.

Team Members

- 202002313 Matsebula Siphesihle M – Programmer
- 202002009 Nkonyane Thembelihle – Designer
- 202004323 Mkhonta Setsabile - Analyst
- 202004109 Magagula Sikhumbuzo - Analyst
- 202002692 Mlothswa Bongani - Programmer
- 201900435 Simelane Sibongumenzi – Designer

User Clients

The CGP tracker is designed for use by learners looking to track their performance towards achieving a goal. It may also simplify the way mentors track the performance of their student.

Risks

The potential risks from the usage of the software arise not from the software itself but from the way the user clients may chose to use it. Risks such as misleading track performance or progress may arise from incorrect data inputs since all the data is fed into the software by the user. Also, incorrect data inputs may result in user performance and progress misrepresentation.

Project Organization

The project is organized sequentially since its design relies on the development of interdependent modules that combine during implementation to form the complete product. The team is divided into three roles.

- Two programmers who must each possess intermediate python graphical user interface programming experience.
- Two analyst who will be responsible for the analysis and documentation of the project.
- One/ Two tester and user interface designer with experience in Adobe XD UI design and will be responsible for testing the final product as well.

Project Phases

Phase 1: UI and Module design

- The programmers and UI designers make out the backbone modules of the project and how they are connected or how they relate to each other and other dependencies.
- The Analysts also begin the documentation of the project.

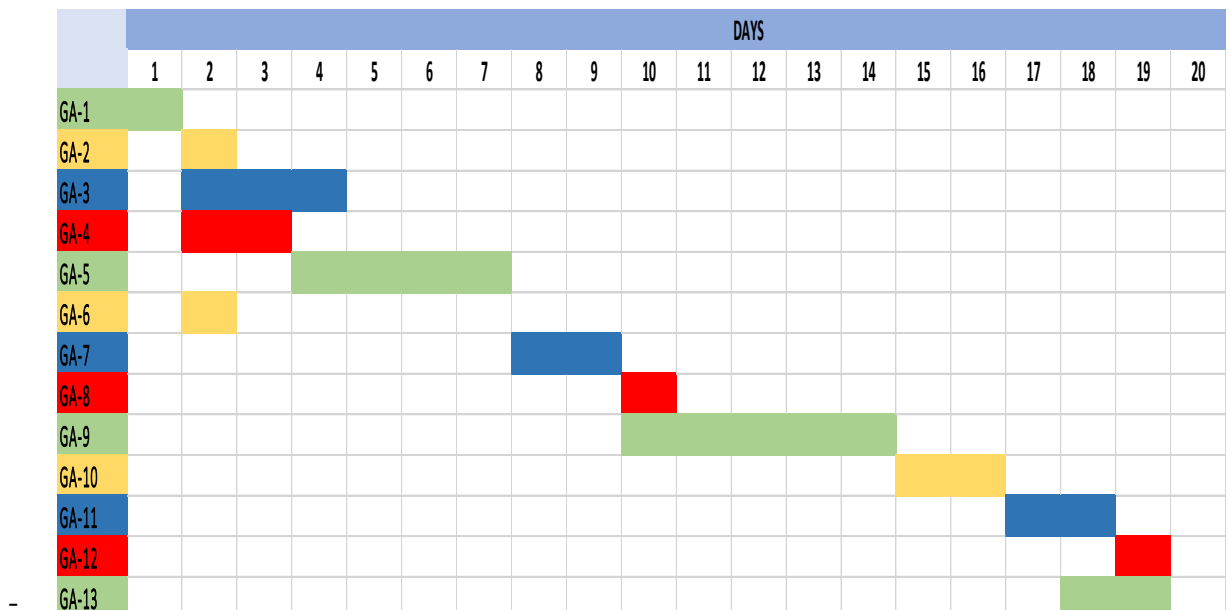
Phase 2: Coding and Testing

- Programmers begin collaborative coding of functions and Modules responsible for the handling of user input data and processing it for further use.
- The modules are tested independently and then how they relate to each other

Phase 3: Testing and Implementation

- The testers and programmers begin testing the final version of the project and riding of any bugs in the modules and user interface in preparation for implementation.

Activity ID	Description	Predecessor	Duration(Days)
GA-1	Meeting	None	1
GA-2	Start Documentation	GA-1	1
GA-3	UI Design	GA-1	3
GA-4	Assessment weight sheet module	GA-1	2
GA-5	Assessment Module	GA-1, GA-4	4
GA-6	GPA Module	GA-1	1
GA-7	Course Module	GA-6, GA-5, GA-4	2
GA-8	Testing I	GA-7	1
GA-9	Database Module	GA-7	5
GA-10	CGPA Display Module	GA-7, GA-9	2
GA-11	Testing II	GA-8, GA-9, GA-10	2
GA-12	Integration	GA-10,GA-11	2
GA-13	End Documentation	GA-2	2



Requirements Analysis and Design

The project modules are to be coded in the python programming language together with supported library tools such as the Kivy library, for the user interface.

Implementation

The project (CGP Tracker) requires an assessment weight sheet from the instructors and lectures to facilitate calculations

Resources

- Devices running android OS or IOS
- Desktop or laptop computer running MS windows or mac OS

