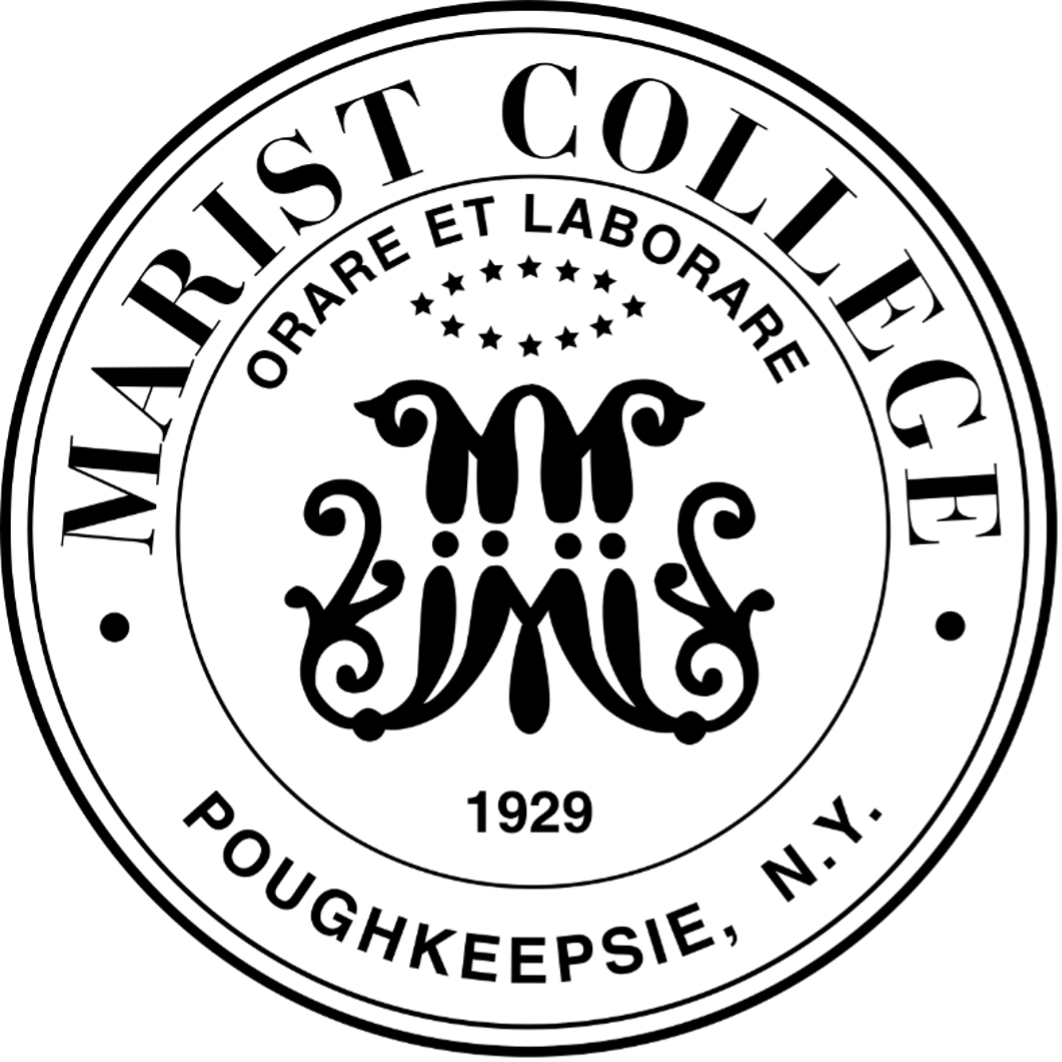
Title and subtitle**Student Learning Management System**

**Team FireDrake**

***Introduction to Programming - CMPT 120L***



***Table of Contents***

# Team Name, Link, Members, & Team Member Description….……………………..……...Page 2

# Project Description…..………………………………………………………………………Page 5

# Project Objective….…………………………………………………………………………Page 5

# Project Requirements..………………………………………………………………………Page 5

# Project Interface Description...………………………………………………………………Page 6

# 

**Project Progress Report 1 of the Student Learning Management System**

**Team Name**

Name of the Team ………………………………………………………………..Team FireDrake

**Github Link**

<https://github.com/cfsarmiento/CMPT120L_StudentLearningManagementSystem_TeamFireDrake>

**Team Members**

1. Christian Sarmiento……………………………[christian.sarmiento1@marist.edu](mailto:christian.sarmiento1@marist.edu) (Team Head)

2. Gabrielle Knapp…………………………..……[.gabrielle.knapp1@marist.edu](mailto:.gabrielle.knapp1@marist.edu) (Team Member)

3. Michael McMahon……………………….…[.michael.mcmahon2@marist.edu](mailto:.michael.mcmahon2@marist.edu) (Team Member)

4. Ethan Morton …………………………………… [ethan.morton1@marist.edu](mailto:ethan.morton1@marist.edu) (Team Member)

5. Cody Carruthers…………………………….…..[cody.carruthers1@marist.edu](mailto:cody.carruthers1@marist.edu) (Team Member)

6. Paul Bergeron…………………………………….[paul.bergeron1@marist.edu](mailto:paul.bergeron1@marist.edu) (Team Member)

**Description of Team Members**

1. ***Christian Sarmiento***

I am a transfer sophomore student from White Plains, NY, transferring from Westchester Community College. I am majoring in Data Science & Analytics with a minor in Business, and I know Python and R proficiently. I have done research projects with multivariable regression machine learning prediction models, as well as basic experience in backend development for a website utilizing API data. I have proficient knowledge in statistical analysis and data cleaning with R. Currently at Marist, I am a part of the Computer Science Society, Marist S.T.A.T, and the Marist Hispanic Society. In the future, I wish to potentially add an additional minor in Computer Science, join the Marist Analytics Club if there is a board again, as well as furthering my resume through side projects, undergraduate research, and relevant coursework.

1. ***Gabrielle Knapp***

Gabrielle Knapp is a freshman at Marist College double majoring in Computer Science and Economics with minors in Spanish and Information Science. She comes from Harrisburg, Pennsylvania and has been enjoying her time adjusting to college life. Activities she currently is participating in include intramural badminton, student government, model united nations, and campus ministry. In her free time, she loves reading, going on long walks, and exploring the outdoors. One thing she misses most about home is going on weekly hikes around the Appalachian Mountain Range that surrounds Harrisburg. She is excited to see how she learns and grows her programming skills throughout this class and her entire time at Marist. Gabrielle is excited to bring her hardworking, can-do attitude to her group in this project for her Introduction to Programming class.

1. ***Michael McMahon***

I am a freshman from Long Island, New York and I am majoring in Computer Science with a minor in music and in the future, possibly a major or minor in cyber security. I love to hang out with friends, watch sports particularly Football and Baseball, listen to music, and play video games. Besides Python, I also have some experience working with Javascript. I am currently in the games society, computer society and I am a member of the Symphonic band and the brass ensemble. I am looking forward to developing my skills in programming throughout my time here and possibly branch out to other things using my knowledge.

1. ***Ethan Morton***

I am a freshman and I’m majoring in computer science with a concentration in software development. I plan on minoring in mathematics, data science, information technology, information systems, and cybersecurity. Besides python, which I’m currently learning, I know Java, C#, HTML, CSS, javascript, and a little bit of SQLite, XML, and Lua. I am from Granby, Connecticut and I enjoy playing tennis, hanging out with my friends, and playing games. The clubs I’m in include: campus ministry, computer society, games society, and I hope to join club tennis next semester.

1. ***Cody Carruthers***

I am a freshman majoring in Computer science and I have a concentration in game design/development. I know Python, C#, Lua, Javascript, Java, and C++ and I used to teach coding before college. I love playing video games and I’m in the games society and love to play soccer. I’m from Southern Connecticut on Long Island Sound.

1. ***Paul Bergeron***

I am a freshman here at Marist college majoring in cyber security with minors in Information Systems, information sciences, and computer science. I am from Ellicott City, Maryland, and I enjoy playing basketball, working out, playing video games, and hanging out with friends. I am on two esports teams here at Marist, the collegiate League of Legends A team, and collegiate CS:GO team. I know java and am currently learning python. I am currently applying to internships and am excited to see what the future might hold.

**Project Descriptions**

***Summary***

This project focuses on creating an app that allows students to manage their classes, accompanying assignments, and grades. This application will make it very easy for the student to view how well they are doing within a given class, semester (past and present), and as well as accumulatively throughout their years here at Marist. The student is able to provide their courses and respective assignment requirements at the beginning of the semester, and as the semester progresses the student is able to provide their grades. This application will give them a rundown of their grades in each of their classes at any given point in the semester (letter grade and number grade), as well as their GPA for that semester at that given point. Additionally, this application will have a Potential GPA Calculator feature where a student is able to put in hypothetical grades for each class and get a potential GPA in return.  
***Requirements***

* Username & password, ability to change both
* The user should be able to:
  + Input list of current and future course rosters
  + Input past GPAs by semester
  + Input entry and graduating month/year (to calculate how many past semesters have been taken)
  + Ability to input each assignment by type for every class. The assignments can have grades put into them at any point
  + Input custom weights for grades for each assignment type in every class
* The Program is Capable of Taking Input and:
  + Calculate grades for each class (letter and number), with weights for each assignment
  + Calculate semester GPA, as well as accumulative GPA
  + Keeps track of past semester GPAs
  + Detect how many past semesters have been taken
  + Keep track of class assignments, by type, in tables
  + Calculate potential GPA given hypothetical class overall grades
    - User will have to provide a grade for each class, calculator defaults each value for class to current grade in the class

***Interface Description***

* Login Screen
  + For non-first time: username and password
  + First Time Set Up:
    - Username & password (can be changed later in settings)
    - Class Management Setup (will be done at the beginning of a new semester):
      * Entry month/year and graduation month/year (to calculate how many past GPAs are needed - graduation month/year can be changed later)
      * Past GPA entry - enter each GPA for each past semester taken (if applicable - cannot be changed)
      * Current Semster
        + Course Roster (Everything here can be changed)

Class Information (For current semester - by class)

Class Name (Ex. CMPT 120L - Intro to Programming)

Assignments

Assignment types - should be custom by class

Assignment weights, by assignment type

* Main Home Page
  + Main Pane
    - Table of assignments, by class (selected on the sidebar)
    - On top of the table: course name, course grade, semester GPA, & accumulative GPA, and status will be displayed
      * Status refers to if the class is being completed or if the student has dropped/withdrawn from the class
    - Settings to add/remove assignments, change assignment grades, weights, types, and class name (if needed)
  + Sidebar
    - Classes (each class is a button that will display the grade and assignment info in the main pane
    - Cumulative Rundown (Displayed in Main Pane)
      * Table of all semesters and their GPAs
        + Semester Year, Session (Fall/Winter/Sprint/Summer), Final GPA, and Status will be displayed in tabular form

Status refers to if the course was completed, dropped, or withdrawn from

* + - Settings
      * Allow change to login info
      * New semester setup
        + Course Roster (Everything here can be changed)

Class Information (For current semester - by class)

Class Name (Ex. CMPT 120L - Intro to Programming)

Assignments

Assignment types - should be custom by class

Assignment weights, by assignment type

* + - * Change to graduation year
      * Withdrawls/drops

NOTE: time needs to be tracked in this program in order for program to detect what year a given student is in, but also so program can recognize the beginning and end of a semsters and can prompt for new classes.