CSCI 437 – Course Project

Out: September 25th
Git Repository: October 1st
Design Presentation & Report: October 9th-11th
Intermediate Presentation & Report: October 30th
Intermediate Presentation & Report: November 15th
Demo: December 4th
Final Presentations: December 4th and 6th
Final Report: December 6th

Goal

Design and build your own game in a group of 4 students following the guidelines and strategies studied in the lectures.

Group Assignments

Group	Team Coordinator	Team Member 1	Team Member 2	Team Member 3
1	Matthew Cohen	Jonathan Buffkin	Wukun Liu	Roshan Manjaly
2	Eyosyas Dagnachew	Casey Frederick	Stephen Hu	Bery Montenegro
3	Andrew Glinsman	Jack Bowden	Alexander Walhout	Christopher Wolinski
4	Andrew Katson	Jeremy Elkayam	Kyle Pederson	Mei-Ting Song
5	Dmytro Shmagin	Marcelino Dayrit	Christopher Short	Zihan Yang
6	Patrick Walker	Santa Leon Vitervo	Rane Squires	Ian Wright
7	Linda Wu	Micharl Darr	Alex Day	Zachary Greenfield

Each team member is expected to contribute equally to each part of the game (i.e., design, coding, art, testing, etc…). The team coordinator is pre-assigned to coordinate the project, and in addition to fulfilling the same roles as other team members, the coordinator has the following additional responsibilities:

1. Setup and maintain the GIT code repository.
2. Manage GIT tickets and assign tasks
3. Set development schedule and milestones.
4. Delegate development tasks to other team members. Note, a team coordinator is also expected to fully participate as a developer.
5. Maintain the game design document and ensure it remains up to date through the development process

6. Manage conflicts between team members.
7. Act as a liaison between the team and the instructor.
8. Submit all presentations and design documents by the deadlines.
9. Submit a final 'management' report detailing the management strategies, challenges encountered, and solutions.

Each team member will give one presentation (i.e., design presentation, two intermediate progress presentations, and a final presentation). The team coordinator will give the final presentation, while other team members will present one of the other three presentations (order to be determined by the group).

Presentations

There are three intermediate/design presentations and a final presentation over the course of the project.

Design presentation: This presentation should carefully detail the design of the game. It should essentially summarize the design document, including concept art/models if available. Inclusion of a timeline with milestones **must** be included in the presentation. Duration of the presentation: 15 minutes. **Groups 1 – 3** will present on **October 9th** , **groups 4-7** will present on **October 11th**. The design document is due for **all** groups on October 11th.

Intermediate presentations: These presentations **must** include a demo/video of the latest prototype. A summary of the challenges encountered (including current challenges) as well as their solutions should be listed. Any updates to the design document and timeline/milestones **must** be summarized. Duration of the presentation: 8 minutes. These intermediate presentations do not need to repeat points from prior presentations.

Final presentation: This presentation **must** include a live demo of the final game, and a summary of the challenges and the solutions. Unique aspects of the design/game should be thoroughly discussed. This presentation should last 20 minutes and should be independent of the three previous presentations.

Final presentation schedule:

- December 4th: groups 1, 2, and 3
- December 6th: groups 4, 5, 6, and 7

Reports

During the course of the project, **four** reports **must** to be submitted before the respective presentation. Each should report the same material as the corresponding presentation, but more extended. Each report should include an up to date design document (PDF), including a changelog and software architecture/class hierarchy. In addition, the **github revision id or tag name** of the latest (compilable on

the lab machines) prototype should be submitted together with the report (PDF). A report should also clearly list the contributions of each team member. The first report should include the proposal and initial design document.

The **team coordinator** is responsible for the production and submission of the report. Only a single report needs to be submitted per group.

Demo

The demo should be in the form of a youtube video, and should be accessible to other students in the class, the lecturer and potential external jury members. The duration should be between 5 to 10 minutes, and should demonstrate the gameplay of the game. The video should be a screen capture video of the game in progress. You can use SimpleScreenRecorder (linux), Fraps (windows) or Quicktime (OSX) to record the game.

Practical

You need to implement your game in C++ using the SFML 2.5 (or higher) library. Your game should run (potentially slowly) on the lab machines.

You **must** use GIT for source code revision management . https://github.com offers free accounts for public repositories . 'git' is installed on the lab machines, and software is available for Linux, Windows or OSX. You can find a GIT tutorial at: https://try.github.io You need to submit the URL (and give the instructor full access) to the repository by October 1st, noon. Each team member is expected to have (and use) a githib account so that the statistics of your contributions are tracked. The team coordinator is responsible for setting up the github and sending the URL to the instructor. You are expected to use the issue ticket system for assigning tasks.

A code repository will make it easier to share code and roll back bad changes. It is important not to store compiled files or your CMakeCache, as these files will be different for each member of your team. Only store code, CMakeLists.txt, and resources (art, music, level data, etc.). You are required to keep the repository up to date, as well as that everyone checks in their own code (i.e., it is not allowed to have only one person be the 'code' manager and commit changes).

Grading

The project accounts for **6/9th** of the total grade. The grading will be as follows:

- 20% of the grade depends on your presentation (**10% bonus** for the student that present the **design presentation**).
- 80% depends on the group effort. This part of the score will be scaled by an effort multiplier (0%-150%) to account for discrepancies in effort within a group (including compensation for under-preforming group coordinators). These 80% of the grade are further assigned as:
    - 10% on the quality of completeness of the reports.

    - 15% on the design (including the design documents)
    - 25% on code quality (use of appropriate coding techniques (OO, components, events, etc.), commented code, etc.)
    - 20% on gameplay (is the game playable, is it balanced, etc.)
    - 10% on the completeness of the game
    - **Up to 20% bonus** will be given for unique/original art or music.
- Team coordinator are enrolled in CSCI-437X, a one credit course. The grade distribution is as follows:
    - 20% on the timeliness of submission of game design documents, presentations, and milestones in the GIT repository
    - 40% on the completeness of the game design documents.
    - 30% on management activities
    - 10% on the management report.

Submission Details

- Reports should be emailed to "ppeers@cs.wm.edu" by the respective deadline (**noon!**). Late submissions are not allowed.
- A link to the demo should also be emailed to "ppeers@cs.wm.edu" by **12/06 noon**.
- Each report needs to include the repository details and the github reversion id or tag name.