EE/CprE/SE 491 WEEKLY REPORT 4

Feb 20th - 26th

Group number: sddec23-13

Project title: Casters and Coders

Client &/Advisor: Mat Wymore

Team Members/Role:
- Brennan Seymour
- Branden Butler
- Theng Wei Lwe
- Wenqin Wu（Cody）
- Edward Dao
- Max Bromet

(All the above information should be there in each weekly report. The format/color scheme etc need not be the same. However, please remove everything that is in a bracket from your final submission. These are just part of the template and need not be a part of the report.)

- o **Weekly Summary**

  The team started discussing about potential game styles that the project can adapt to. We looked into a top-down, pixel-like game approach. We continued working with Unity tutorials and researched languages to embed into the game.

- o **Past week accomplishments** *(Please describe/summarize as to what was done, by whom, when and, collectively as a group. This should be about a paragraph or two in length. Bulleted points are acceptable as well. Please keep only your technical details related to your project. Figures, schematics, flow diagrams, pseudocode, and project related results are acceptable, but please ensure that they are legible (clear enough to read) and to provide an explanation. If researching a topic, please add a few details about what was learned and how it is relevant to the project. If two or more people worked on a single task, be sure to distinguish how each member contributed to the task. Specific details relating to the assistance provided to other members may be included here. **Do not include classwork, such as individual reflection assignments, and group***

• Wenqin Wu: So for this week I havent do much something breakthrough on this project,mostly still exercising on Unity, I m trying to figure out what is "mono behavior" because I can see this getting inherent almost every classes. Turns out, if you using mono, there is a warning about "new " keyword, so the solution is neither do not use instantiate a new object or add it into the scene manually. This is one thing I figure out this week.

• Theng Wei Lwe: Worked on design documentation. Browsed Unity content on YouTube to learn more about the platform. Went through more game design concepts that could potentially fit our project.

• Brennan Seymour: Got a webassembly environment running in Unity (Wasmtime). I haven't been able to integrate a compiler yet, as it seems there are no good dotnet options for these. I would have to wrap a native compiler with dotnet tooling, and worry about shipping platform-specific compiler runtimes with different builds. I'm beginning to think that webassembly is not an ideal option for this reason.

• Branden Butler: I got a Lua interpreter running using the NeoLua project. My initial plan was to use MoonSharp or Lua.NET but both projects had their own problems. MoonSharp was completely abandoned and Lua.NET had a very obtuse API that acted as a simple wrapper around the native C API. NeoLua is written in pure C# so it has complete access to the entire CLR and is able to integrate with the rest of our code very easily

• Max Bromet: The main thing that I did this week was work on fleshing out ideas for the game's design. We're currently considering not doing much in the way of combat, but instead focusing on puzzle solving. Environmental dangers may play a role. We also are considering making it so that the player is rewarded for learning more about coding as they go, so an experienced coder could potentially become really powerful really quickly.

• Edward Dao: Continuing working on learning Unity and aspects of it. Review over the Design Document other than just the professionalism part.

- **Pending issues** *(If applicable: Were there any unexpected complications? Please elaborate.)*

   • Team Member 1:

   • Team Member 2:

   • Team Member 3:

   • …

o **Individual contributions** *(Creating this section is optional, but it is **Required to include the "Hours Worked for the Week" and their "Total Cumulative Hours" for the project for each member somewhere relevant in your report. Your individual weekly hours should be at a minimum of 6-8 hours for this course. So please manage your time well. Also, ensure that individual contributions support your claim to the weekly hours. Be honest with the reports.)***

NAME	Individual Contributions *(Quick list of contributions. This should be short.)*	Hours this week	HOURS cumulative
Branden Butler	Got Lua working after trying multiple different projects	3	22
Wenqin Wu	Keep warm myself get familiar with Unity	3	13
Edward Dao	Working on Unity and reviewed the Design Document	2	11
Theng Wei Lwe	Unity videos and game concepts	3	11
Max Bromet	Fleshed out more game ideas	3	11
Brennan Seymour	Researched and integrated Wasmtime successfully.	6	17

o **Comments and extended discussion** *(Optional)*
   I think that we should lock in a set of requirements this week, and if possible decide definitively on a language embedding to use.

o **Plans for the upcoming week** *(Please describe duties for the upcoming week for each member. What is(are) the task(s)?, Who will contribute to it? Be as concise as possible.)* • Team Member Wenqin Wu: Keep study .Net and try to install it on a local computer and try to run a few test to get hands on it. Discuss with teammates based on the response from the questionnaire.

   • Wenqin Wu: Need to start working on storyline and diagrams so bad.

   • Theng Wei Lwe: Working on diagrams and project directions. Help out with design documents and other areas of project requiring assistance.

・Brennan Seymour: Start drafting some design documents detailing world structure, puzzles, scenarios…

・Branden Butler: Examine current working languages, draw up a list of pros and cons of each, and during our team meeting decide on a definitive language. Perhaps investigate a Wasm language with an integrated compiler (maybe a JIT scripting language) so we don't have to deal with compiler issues

・Max Bromet:

・Edward Dao: Figure out what task need to be done based on the design document

o **Summary of weekly advisor meeting** (*If applicable/optional)*
  (Provide a concise summary on the contents and progress made during the advisor meeting.)

Grading criteria

Each weekly report is worth 10 points. Scores will be awarded as follows:

・**8 – 10**: Progress for your project seems to be suitable. Documentation and hours reported by team members are adequate.

・**6 – 8**: There is scope of improvement both in your report and your project progress. Can consult with instructor/TA after class for further inputs.

・**< 6**: Please talk to instructors/TA after class hours about any difficulties that you/your team is facing.

Each weekly report should be unique in that they have a unique set of supporting details for your contributions. So please do not just copy your reports from the previous week. In addition, please avoid any personal pronouns (he, she, I, you). Try to keep your reports as neat as possible.