

EE/CprE/SE 492 BI-WEEKLY REPORT 14

October 26 – September 8

Group number: 18

Project title: GPGPU Parallelization of Memworld

Client &/Advisor: Dr. Wymore

Team Members/Role:

- **William Blanchard, Parallelization Lead**
- **Mason DeClercq, Team Lead**
- **Jay Edwards, Documentation Lead**
- **Cristofer Medina Lopez, Integration Lead**
- **Dalton Rederick, Communications Lead**
- **Collin Reeves, Game Development Lead**

○ **Bi-Weekly Summary**

Over these past two weeks, work on the game worlds continued. World 2 is close to being completed and World 3 and 4 are making progress. The player used to get stuck on individual voxels on the ground. For example, a flower would stop the player from moving. Now the player automatically “jumps” over those things. Unit tests for the application are being added. Work on the final report and poster is beginning to start.

- **Past weeks accomplishments**

- Wil Blanchard:

- Discussed plans for final world layout with Cris
- Implemented variable gravity for final level
- Added ability to turn variable gravity on and off for certain worlds.

- Mason DeClercq :

- The player does not get stuck on small ledges and “jumps” over them automatically
- Helped fix world 2 with crashing problem
- Worked on documentation
- Implemented moving platforms (player moves with the platforms)
- Worked on unit tests
- Added checks for file reading

- Jay Edwards:

- Worked on World 3 level design (placing the objects in the levels and getting the meteors to reset the level)

- Cristofer Medina Lopez:

- Tested teammates’ feature branches on Mac, made any necessary changes and integrated into main
- Fixed new issue related to window scaling for Mac where only renders pixel textures in ¼ of window
- Worked on World 4
 - Met with Wil to devise concept and strategy for building World 4
 - Creating assets for building World 4

- Dalton Rederick:

- Debugged issues with world 2
- Helped with miscellaneous features
- Implemented collision based rotation on 90 degree intervals for file importing

- Collin Reeves:

- Continued work on World 2 with Dalton
- Made gravity and jump height configurable during runtime (so it can change each level)
- Looked into making player “height” something configurable on a per level basis
 - Has some quirks with the new ledge fix that Mason implemented
- Looked into displaying text on a per level basis (level objectives, hints, etc)

- **Pending issues**

- *No pressing issues at this time*

- **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u> <i>(Quick list of contributions. This should be short.)</i>	<u>Hours worked</u>	<u>HOURS cumulative</u>
Wil Blanchard	Communications with Cris on plans for World 3 development, implemented optional variable gravity	8	59.5
Mason DeClercq	Implemented a way for characters to go over small voxel ledges. Worked on documentation. Implemented moving platforms. Worked on unit tests. Added checks for file reading.	14.5	178.5
Jay Edwards	Worked on World 3 implementation	10	68
Cristofer Medina Lopez	Testing and integrating feature branches into main. Fixing Mac issues. World 4 development	9	78.5
Dalton Rederick	Debugged issues with world 2 Helped with miscellaneous features Implemented collision based rotation on 90 degree intervals for file importing	9	69
Collin Reeves	Continued working on world 2. Made gravity and jump height configurable. Looked into making player "height" something configurable on a per level basis Looked into displaying text on a per level basis (level objectives, hints, etc)	4	77

- **Plans for the upcoming weeks**

- Wil Blanchard: Figure out how to integrate moving platforms, look into creation of new UI elements
- Mason DeClercq : Continue to work on the final paper/presentation. Help others where needed.
- Jay Edwards: Finish World 3 level design and get the meteors to constantly fall and reset
- Cristofer Medina Lopez: Continue development plan for World 4. Testing and integrating teammates features on Mac.
- Dalton Rederick: Try and finish up World 2 now that the bottlenecks have been addressed
- Collin Reeves: Finish world 2, get powerups implemented into world, be able to set player height each level.

- **Summary of the advisor meeting**

We did not have a meeting with our advisor over the past 2 weeks.