

Week Commencing	Tasks Set	Notes/Outcomes
01/11/2021	Create a basic setup for generating voxels as meshes.	Made an interior culled voxel chunk.
08/11/2021	Attempt to implement the 'runs' algorithm.	Issues are occurring when implementing the runs for the top and bottom faces.
06/12/2021	N/A	Began writing the research report.
16/12/2021	N/A	Submitted the research report.
31/01/2022	Fix the 'runs' algorithm.	Managed to get the algorithm to work.
07/02/2022	Test the algorithms with more complex voxel layouts.	The algorithm doesn't produce accurate results when using complex voxel layouts.
14/02/2022	Attempt to fix the issues with the 'runs' algorithm.	An attempt was made to fix the issues however no visible progress could be made. Used contingency of porting an existing implementation, but was unable to get this to work.
07/03/2022	Research into data structures.	Determined that including data structures into the project may be outside of the scope of what is possible for this project. A reassessment of the aims is required.
04/04/2022	Go over issues on moving the project forward with my supervisor.	N/A
18/04/2022	Develop an infinite terrain for 'paging' in the form of chunking.	Made a start to the terrain generation. Errors with duplicate chunks loading on-top of each other.
25/04/2022	Fix the issues with terrain generation.	Duplicate chunks are avoided by storing them in a Dictionary and checking if they already exist.
16/05/2022	Implement a 'lazy' chunking algorithm.	This was simple to implement and will allow for more comparisons for the final report.
09/05/2022	Split the existing meshing algorithms into separate structs	The meshing algorithms now exist within an individual job,

	to facilitate Unity Jobs.	which has created a reasonable speed-up in performance when moving around the terrain.
13/06/2022	Implement a basic interface to modify the terrain height, offset.	Implemented a basic interface which uses the Unity inspector.
20/06/2022	Add a method of switching meshing algorithms.	Switching between meshing algorithms can be done using a drop-down in the Unity inspector.
04/07/2022	Begin writing the report.	N/A
11/07/2022	Submit the report.	N/A