Timeline plan (on 29/1/13)

End of January:

Considerations: Exams and coursework may leave me short of time.

Targets:

- Decide on, and have an overall knowledge on, the method of fluid dynamics simulation to use.
- Start work on the mesh code.

End of February:

Targets:

- Make a working demo of the mesh renderer.
- Start a prototype of fluid simulation

End of March:

Targets:

- Create landscape meshes
- Improve on fluid simulation

End of April:

Targets:

- Finish a prototype of fluid simulation
- Assess the result (with initial feedback from others)

End of May:

Considerations: Exams will leave me short of time

Targets:

- Improve on fluid simulation (change tack if prototype not successful)

End of June:

Considerations: Exams will leave me short of time

Targets:

- Improve on fluid simulation
- Add fluid effects
- Add mesh scenery
- Assess the result (with feedback from others)

End of July:

Considerations: Summer holidays

Targets:

- Finish fluid simulation
- Polish demo: add effects and decorations
- Look for / try to make some accompanying music?

End of August:

Considerations: Summer holidays

Targets:

- Polish demo: add effects

End of September:

Considerations: UCAS applications may leave me short of time

Targets:

- Polish demo

October:

Targets:

- Polish demo

Final submission by the second week of October

Timeline plan (on 30/4/13)

(Timeline created 14 January)

End of January:

Considerations: Exams and coursework may leave me short of time.

Targets:

- Decide on, and have an overall knowledge on, the method of fluid dynamics simulation to use. (done)
- Start work on the mesh code. (done)

End of February:

Targets:

- Make a working demo of the mesh renderer. (done)
- Start a prototype of fluid simulation (done, 7 March)

End of March:

Targets:

- Improve on fluid simulation (done)

End of April:

Targets:

- Research the method of cloth simulation to use (done)

(Timeline revised 30 April from this point onwards)

End of May:

Considerations: Exams will leave me short of time

Targets:

- Implement tessellated grid mesh (est. 6 hours)
- Implement constraints for mesh (est. 6 hours)
- Implement verlet integration (est. 6 hours)
- Create prototype of 3D cloth simulation using above (est. 10 hours)
- Create prototype of 3D fluid simulation using above (est. 4 hours)

End of June:

Considerations: Exams will leave me short of time

Targets:

- Implement camera perspective (est. 6 hours)
- Implement octrees (est. 12 hours)
- Cloth simulation collision detection using octrees (est. 8 hours)
- Assess the result (with initial feedback from others)

End of July:

Considerations: Summer schools will leave me short of time (only two weeks in this month!)

Targets:

- Improve on fluid simulation
- Add fluid effects
- Improve on cloth simulation
- Assess the result (with feedback from others)

End of August:

Targets:

- Finish fluid simulation
- Polish demo: add effects and decorations
- Look for / try to make some accompanying music?

End of September:

Considerations: UCAS applications may leave me short of time

Targets:

- Polish demo

October:

Targets:

- Polish demo

Final submission by the second week of October

Timeline plan (final, since 17/6/13)

(Timeline created 14 January)

End of January:

Considerations: Exams and coursework may leave me short of time.

Targets:

- Decide on, and have an overall knowledge on, the method of fluid dynamics simulation to use. (done)
- Start work on the mesh code. (done)

End of February:

Targets:

- Make a working demo of the mesh renderer. (done)
- Start a prototype of fluid simulation (done, 7 March)

End of March:

Targets:

- Improve on fluid simulation (done)

End of April:

Targets:

- Research the method of cloth simulation to use (done)

(Timeline revised 30 April from this point onwards)

End of May/June:

Considerations: Exams will leave me short of time

Targets:

- Research linear algebra, representing 3D points and transformations as vectors, matrices and quaternions (done)
- Implement grid mesh (est. 6 hours) (done, 8/5/13)

(Timeline revised 17 June from this point onwards)

End of July:

Considerations: Summer schools will leave me short of time (only two weeks in this month!)

Targets:

- Implement verlet integration (est. 6 hours) (done, 28/6/13)
- Create prototype of 3D fluid simulation (est. 4 hours)

End of August:

Considerations: Summer arrangements: I will only have one free week in August

Targets:

- Implement camera perspective (est. 4 hours) (done, 13/8/13)
- Review sources used and start writing up evaluations (started)

End of September:

Considerations: University applications may leave me short of time

Targets:

- Implement a bridge simulation game with verlet integration (done, 14/9/13)
- Assess the result of wave and physics demos with feedback from others (done, 15/9/13)
- Polish demo: add effects and decorations (done, added light effects 27/9/13)
- Prepare presentation (started)

October:

Targets:

- Polish demo
- Finish presentation

Final submission by the second week of October