QUEEN’S UNIVERSITY OF BELFAST COMPUTER SCIENCE

Minute of Project Supervision Meeting

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Student Attendee Names: Debdal Chowdhury

Chelsea De Marseilla

Project Module Code: CSC3002

Project Supervisor: Pantelis Sopasakis

Meeting Number: 07

Date of Meeting: 12/11/2024

Progress since last meeting, and decisions arrived at during meeting:

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* CM:
* Removed CFL calculation for ensuring stability, as CN method is unconditionally stable
* Merged changes into the main branch
* DC:
* Merged changes into the main branch
* Prof. Sopasakis:
  + Demonstrated how to transform the heat equation (with friction) to the original 1d heat equation
  + Showed how we could utilise python classes to format our code
  + Shared notes on Obsidian

Action Points:

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* CM:
  + Study the equivalence of the Black Scholes equation to the 1D Heat Equation
  + Attempt to solve the equation with any numerical schemes
* DC:
  + Implement an explicit solver for the 2D Heat Equation
  + Study the Crank-Nicolson method for solving the 2D Heat Equation with both the 5-point and 9-point stencil
  + Try to implement the CN method with the 5 point stencil

Date of next meeting:

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Tuesday, 19th of November 2024, 12:00pm

Agreed minute should be initialled by the supervisor.

Supervisor's Initials:

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Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor's Comments:

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