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: 04

Date of Meeting: 25/10/2024

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

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* CM:
  + Gave a presentation of her simulation of the 1D heat equation using the explicit method + her plan
* DC:
  + Discussed the initial problem statement and work plan submitted, and asked for advice on literature review for the problem statement
* Talked about literature review (how to do it) and piece of advice by Prof. Sopasakis: have a working document that will help you make sense of the numerical schemes you’ll be using (e.g., write down the exact steps of the Crank-Nicolson method); this will help you with your reports later
* GitHub: Start to use issues, branches, and PRs

Action Points:

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* Simulations:
  + 1D heat equation + Crank-Nicolson method (described nicely in LeVeque’s book)
  + 2D heat equation + explicit method
  + 2D heat equation + Crank-Nicolson method
* Look into the alternating directions implicit method (Section 9.8.2 in LeVeque)
* Within the next month: familiarise with the notions of convergence, consistency, and stability of numerical schemes

Date of next meeting:

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Friday, 29th of October 2024, 12:00pm

Agreed minute should be initialled by the supervisor.

Supervisor's Initials: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor's Comments:

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