Algorithms for Game Design - laboratory work

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2024/11/29

Assignment

- **Find an Open-Source Game Code:**
  Select a game-related open-source project that incorporates an algorithm of interest. You may choose any algorithm and any language relevant to game development, such as pathfinding, procedural generation, physics simulation, or artificial intelligence. Ensure the codebase is well-documented and runnable on your system.

Assignment

- **Read the Algorithm and Run the Code:**
  Set up the project in your development environment, resolve dependencies, and execute the code to observe how the algorithm functions within the game.

Assignment

- **Classroom Demonstration:**
  During the lab session, you will present the project to the class. Your demonstration should include:
  - An overview of the game and its purpose.
  - An explanation of the algorithm being used and its role in the game.
  - A live demonstration of the code running, showcasing the algorithm in action.

Assignment

- **Write a Detailed Report: (also the final assignment)**
  After the demonstration, write a report that includes the following sections:
  - **Introduction:** Describe the game project, the chosen algorithm, and its relevance to the course.
  - **Algorithm Explanation:** Provide a detailed analysis of the algorithm, including its theory, implementation, and importance in game development.
  - **Execution and Observations:** Summarize the process of setting up and running the code. Highlight challenges, insights, and outcomes from the demonstration.
  - **Reflection:** Discuss what you learned from this assignment and any potential improvements or alternative approaches to the algorithm.
  - ...

Assignment

- **Deliverables:**
  1. In-class demonstration to TA during the lab session.
     - Runnable project is preferable.
     - Video is also OK.
  2. A written final report submitted (DOC or PDF format).
     - To : gamealgorithm@163.com

Schedule

- 2024/11/29 13:25 – 15:00 (+3)
- 2024/12/06 13:25 – 15:00 (+2)
- 2024/12/13 13:00 – 18:00 (+1)
- 2024/12/20 13:25 – 15:00 (+0)

- Show your results whenever you are ready !
- Extra points for early birds !