**IDS 706 Final Project Teamwork Reflection**

**Team Members:** Zella Zhao, Junpei Liao, Wenye Li, Zhenkai Zhu

**1. Team’s Functioning**

**Responsibilities**

* **Zhenkai Zhu’s Contribution:**
  1. **Load Testing:** Conducted comprehensive load tests to evaluate system performance under various traffic levels. Provided actionable insights to optimize system scalability and reliability.
  2. **Infrastructure Deployment:** Utilized Infrastructure as Code (IaC) principles to deploy the application to AWS, ensuring a robust and repeatable deployment process.
  3. **AWS Services Implementation:** Configured and managed essential AWS services, including Elastic Compute Cloud (EC2), and Elastic Container Service (ECS), to enhance application availability and fault tolerance.

**2. Peer Evaluation**

**Zella Zhao**

*Grade: A*

* **Strengths:**
  1. Exhibited strong technical writing skills by producing a clear and well-organized README file, which outlined the project setup, usage, and limitations effectively.
  2. Created an insightful system architecture diagram, simplifying complex relationships and data flows for better understanding.
  3. Proposed innovative solutions for quantitative assessments, enabling the team to evaluate system reliability using data-driven metrics.
* **Improvements:**
  1. Starting documentation earlier in smaller increments could alleviate workload during later project stages.
  2. Participating more actively in early brainstorming sessions would foster collaborative ideation.
  3. Informal check-ins with teammates could help refine technical documentation to meet team needs.

**Junpei Liao**

*Grade: A*

* **Strengths:**
  1. Demonstrated excellent skills in user interface design and development, delivering an intuitive and user-friendly application experience.
  2. Effectively communicated design concepts and decisions, ensuring alignment and clarity across the team.
  3. Maintained consistent progress by adhering to deadlines and managing time efficiently.
* **Improvements:**
  1. Simplifying overly complex features could improve efficiency while maintaining functionality.
  2. Including more context in technical documentation would enhance project maintainability.
  3. Actively soliciting feedback during the early design stages could foster stronger team collaboration.

**Wenye Li**

*Grade: A*

* **Strengths:**
  1. Built and optimized Dockerfiles to facilitate containerized deployment, ensuring an efficient and consistent runtime environment.
  2. Established a robust CI/CD pipeline using GitHub Actions, automating testing, linting, and code quality checks for seamless development workflows.
  3. Configured GitHub Codespaces and .devcontainer files to create a standardized development setup that enhanced team productivity.
* **Improvements:**
  1. Sharing leadership responsibilities could promote a more balanced team dynamic.
  2. Spending additional time refining solutions could enhance their robustness and effectiveness.
  3. Seeking team input during early decision-making phases could lead to more collaborative outcomes.

**3. Group Discussion Feedback**

The discussion about each team member's strengths and areas for improvement provided valuable insights into our collaboration. My teammates highlighted my strong technical skills, particularly in AWS infrastructure setup and load testing. They appreciated my ability to quickly learn and implement new technologies, which contributed significantly to the project’s stability and scalability.

At the same time, my teammates suggested that I could improve on sharing updates more frequently to keep everyone informed of progress. Additionally, they pointed out that providing more detailed documentation for deployment workflows could help the team understand and maintain the system more easily. This feedback has helped me realize that effective teamwork involves not just strong technical execution but also ensuring transparent communication and knowledge sharing. Moving forward, I aim to improve in these areas to better support the team and enhance our collaboration.