



CAPSTONE PROJECT REGISTER

Class: **Duration time:** from/20.... To/20.....

(*) **Profession:** <Software Engineer>

Specialty: <ES> ☐

<IS> ☒

<JS> ☐

(*) **Kinds of person make registers:**

Lecturer ☒

Students

1. Register information for supervisor (if have)

No.	Fullname	Phone	E-Mail	Title
Supervisor	Phạm Thanh Trí	0937 359 396	Tript9@fe.edu.vn	Mr.
Supervisor				Mr.

2. Register information for students (if have)

	Full name	Student code	Phone	E-mail	Role in Group
					Leader
					Member
					Member
					Member

3. Register content of Capstone Project

(*) 3.1. Capstone Project name:

- English: GameMkt - A Platform for Game Development and Marketing
Collaboration Vietnamese: Nền Tảng Kết Nối Phát Triển và Marketing Game
- Abbreviation: GameMkt

A. Context:

The rapid growth of the gaming industry has increased the demand for skilled game developers and marketers. To foster collaboration between these two disciplines, GameMkt aims to provide a platform that connects SE and Biz students, enabling them to work together on game development and marketing projects. This platform will facilitate the exchange of ideas, resources, and expertise, leading to the creation of innovative and successful games.

B. Proposed Solutions

GameMkt will be a web-based platform with the following core functionalities:

- **Functional requirement** (Proposed Functionalities)

1. Project Marketplace

- For Software Engineering (SE) Students:
 - Create and Post Projects: Create new game development projects, detailing requirements, timelines, and necessary skills.
 - Project Management: Update project status, manage teams, and assign tasks.
 - Submit Completed Projects: Submit completed projects for faculty evaluation.
- For Business (Biz) Students:
 - Browse and Select Projects: Browse through available projects, search based on specific criteria (genre, platform, skill level, etc.).
 - Form Teams: Form teams with SE students, considering skill sets and project requirements.
 - Execute Marketing Campaigns: Develop and implement marketing strategies and plans.
 - Report Results: Report on the performance of marketing campaigns within the platform.

2. Team Collaboration Tools (optional)

- Project Management: Utilize tools like Trello or Asana for task management, tracking, and progress updates.

- Version Control: Employ Git for efficient code management and collaboration.
- Communication: Utilize real-time chat and forums for communication and knowledge sharing.

3. Marketing Resource Hub

- Resource Library: Provide a collection of marketing templates, tutorials, and case studies.
- Community Forum: Foster discussions on marketing strategies and best practices.

4. Mentorship Program (optional)

- Mentor Matching: Connect students with industry professionals for guidance and mentorship.
- Learning Opportunities: Offer workshops and webinars on game development and marketing.

5. Roles and Additional Functionalities

- Faculty (optional):
 - Course Management: Monitor the progress of student projects.
 - Project Evaluation: Evaluate the quality of completed projects.
 - Submit to Marketplace: Submit high-quality projects to the marketplace for Biz students.
- Moderator:
 - Content Moderation: Review and approve project submissions, posts, and comments.
 - Faculty Proposal Approval: Approve faculty submissions of projects to the marketplace.
- Admin:
 - System Management: Manage users, system settings, and maintenance.
 - Permission Management: Assign permissions to faculty, moderators, and students.

6. Additional Notes (optional):

- Integration and Automation: Explore integrations with popular game development tools (Unity, Unreal Engine) and marketing platforms (Google Analytics, social media APIs) for enhanced functionality.
 - Data Analytics: Implement data analytics to track user behavior, project performance, and marketing campaign effectiveness.
 - Gamification: Incorporate gamification elements to motivate user engagement and participation.
 - Scalability: Design the platform to handle increasing user load and project complexity.
- **Non-functional requirement:**
 - **Performance:** The system must have a fast response time, especially for critical actions such as searching for projects, sending messages, and uploading files. The system should be scalable to handle increased user load and data volume.
 - **Security (optional):** User authentication and authorization must be secure, protecting user data. Sensitive data such as passwords and payment information must be encrypted. The system should be protected against various attacks such as DDoS and SQL injection.
 - **Reliability:** The system must be stable and operate with minimal downtime. It should have a mechanism for automatic recovery in case of failures.
 - **Usability:** The user interface should be intuitive and easy to use. The user experience should be smooth and enjoyable. The system should be compatible with various devices and browsers.
 - **Scalability:** The system's database and architecture should be designed to accommodate growth in data and user base.

(*) 3.2. Main proposal content (including result and product)

a. **Theory and practice (document):**

- Students should apply the software development process and UML 2.0 in the modelling system.

- The documents include User Requirement, Software Requirement Specification, Architecture Design, Detail Design, System Implementation, and Testing Document, Installation Guide, sources code, and deployable software packages.
- Server-side technologies:
 - Server: .NET Core / NodeJS
 - Database Design: MySQL, SQL Server.
- Client-side technologies:
 - Web Client: HTML5, CSS3, Javascript, ReactJS.
 - Mobile App: React Native / Flutter.

b. Products:

- Mobile App for Student (Simulation)
- Mobile App for FPT University's students and staff.
- Web API for System.
- Web Admin for Admin.

c. Proposed Tasks:

- Task package 1: Develop the Web application of the System for Admin.
- Task package 2: Develop Resource Sharing Hub function
- Task package 3: Develop Report System / Dashboard to tracking the performance of Marketing plan, Game download statistics...
- Task package 4: Build – Deploy and Test the system.
- Task package 5: Prepare all the required documents: System analysis and Design, Test plan, Installation manual, User manual.

4. Other comments (propose all relative things if have).

Supervisor (If have) <i>(Sign and full name)</i>	HCM, date /20 ... On behalf of Registers <i>(Sign and full name)</i>
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