Milestone 1 - Software System

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1 Overview

The purpose of this project is to design the architecture for your chosen idea. This milestone involves analyzing requirements and developing a conceptual design of the system architecture. The team will demonstrate their understanding and application of functional requirements, non-functional requirements, software decomposition, design patterns, and either Domain-Driven Design (DDD) or Business Process Model and Notation (BPMN) concepts by incorporating these elements into the project documentation. This project will be a collaborative effort by a team of 6 to 8 members.

2 Preprocessing

Requirements Analysis: List core functional requirements of the system, such as browsing, viewing, shopping cart, checkout etc.
List non-functional requirements such as performance, scalability, security, deployment etc.

Conceptual Design: Propose architectural design patterns suitable for this system. Justify choices.

Software decomposition It is crucial for defining the system's structure and breaking it down into manageable components. show the techniques used.

Domain-Driven Design (DDD): Domain-Driven Design (DDD) is a software development approach that emphasizes the importance of understanding the business domain and aligning the software model with it. By employing DDD principles, you can identify and define core business concepts, create a ubiquitous language, and design a domain model that accurately reflects the business requirements. Document how you have applied these concepts within your project, including the identification of bounded contexts, aggregates, entities, value objects, and domain services. Show how the domain model interacts with other components of your software architecture, such as the user interface, persistence layer, and external systems.

Business Process Model and Notation (BPMN): Business Process Model and Notation (BPMN) to document and visualize the business processes within your software solution. BPMN provides a standardized notation for representing workflows and business processes, enabling clear communication and analysis of process flows. Identify the key processes within your software system and describe the activities, events, gateways, and flows involved in each process, and explain how these processes relate to the overall architecture of your project.

Documentation: Remember, the primary goal of this milestone is to demonstrate your understanding of the chosen methodology and its application to your project. Be sure to include clear and concise documentation that explains the rationale behind your design decisions. You can use diagrams to visual representations that are essential to convey complex concepts effectively. In addition to the documentation, provide a brief reflection on the challenges and benefits you encountered while implementing either DDD or BPMN.

3 Submission

Submit your project in PDF form
Link for submission : https://forms.gle/PvshQTqKiEY1niDR8
Deadline: 22/11/2024, 11:59 PM