Functional Requirements for Exam-Store

General Functionality

- The system provides authentication for users.
- The system generates and provides comprehensive reports on user activities performance, and system analytics.
- Users can submit feedback, report issues, or seek support through a dedicated system interface.
- Users can download questions, and other relevant content for offline access.
- > Caching with Restriction:
 - The system incorporates caching to allow users to access previously downloaded content even when the internet is unavailable.
 - Caching is designed to restrict the sharing of cached files when accessed offline. Files are encrypted or secured to prevent unauthorized sharing.
- Advertisements may be displayed within the system, and the platform provides a mechanism for managing and controlling ad content.
- The system integrates with a secure payment gateway for premium features or content, providing users with a seamless payment experience.
- > The system sends notifications to users for study reminders, announcements, and other relevant information.
- Users are restricted to a limited number of simultaneous logins across multiple devices to enhance security.

Centralized Exam Repository

- Requirement 1: The system must provide a searchable interface for users to access past exam models for national, regional, and exit exams by using keywords specific criteria only from their profiles.
- Requirement 2: The platform should support the uploading and management of diverse exam content, ensuring proper categorization and organization.
- Requirement 3: Systems must provide filters to narrow down exam options based on parameters such as subject or exam type.
- Requirement 4: The system should allow users to take exams under timed conditions.
 - Sub-requirement 4.1: Users should be able to set a timer for the entire exam.
 - Sub-requirement 4.2: Users should have the option to take exams without time limitations.
- > Requirement 5: The system must provide an explanation and answer.

- Sub-requirement 5.1: Users can choose to view the explanation and answer at the end of each question.
- Sub-requirement 5.2: Users can also opt to view the explanation and answer at the end of the entire exam.
- > Requirement 6: The platform should allow note-taking during the exam.
- Requirement 7: Users should have the ability to provide feedback, report issues, and review specific questions or the entire exam
 - Sub-requirement 7.1: Users can provide feedback and report issues for specific questions.
 - Sub-requirement 7.2: Users can provide feedback and review the entire exam.

Functional Requirements for Dynamic Question Generation

- Requirement 8: The system must integrate with the ChatGPT API to dynamically generate questions based on user input.
- Requirement 9: Users should be able to specify the topic or subject for which they want dynamically generated questions.
- Requirement 10: Users should have the option to receive explanations and answers for dynamically generated questions.
 - Sub-requirement 10.1: Users can choose to view explanations and answers immediately after answering each question.
 - Sub-requirement 10.2: Users can also opt to review explanations and answers at the end of a dynamic question session.
- Requirement 11: The system should provide users with performance analytics after each session of dynamically generated questions.
 - Sub-requirement 11.1: Users should see their accuracy rate for different topics.
 - Sub-requirement 11.2: The analytics should help users identify areas for improvement.
- Requirement 12: The system must implement batching for dynamic question generation based on either a specified period or the number of users.
 - Sub-requirement 12.1: Batching by period: Questions can be generated for multiple users within a specific time interval.
 - Sub-requirement 12.2: Batching by the number of users: Questions can be generated collectively for a specified number of users.
- Requirement 13: The system must cache generated questions to minimize costs associated with repeated generation for multiple users.

Functional Requirements for Personalized Study Planner

- Requirement 14: Users must have the ability to input their exam date and receive personalized study plans.
 - Sub-requirement 14.1: The system should guide users through a simple input process to set their exam date.
 - Sub-requirement 14.2: Users can adjust their exam date if necessary.
- Requirement 15: The system should provide recommendations for daily study goals based on the user's input and preferences.
 - Sub-requirement 15.1: Study goals should be automatically generated based on the remaining time until the exam.
 - Sub-requirement 15.2: Users can customize study goals according to their preferences and availability.
- Requirement 16: Users should receive study reminders to stay on track with their personalized study plans.
 - Sub-requirement 16.1: Reminders should include study sessions, breaks, and important deadlines.
 - Sub-requirement 16.2: Users can set the frequency and timing of study reminders.
- Requirement 17: Users must have the ability to perform CRUD (Create, Read, Update, Delete) operations on tasks within their study plan.
 - Sub-requirement 17.1: Users can create new tasks, specifying details such as task name, description, and duration.
 - Sub-requirement 17.2: Users can view a list of existing tasks in their study plan.
 - Sub-requirement 17.3: Users can update task details or mark tasks as completed.
 - Sub-requirement 17.4: Users can delete tasks that are no longer relevant or necessary.
- Requirement 18: Users should be able to set periodical goals for their study plan.
 - Sub-requirement 18.1: Periodical goals could include weekly or monthly targets for specific subjects or topics.
 - Sub-requirement 18.2: Progress towards periodical goals should be tracked and visualized.
- Requirement 19: Upon completing the personalized study plan, users should have the option to take a quiz to assess their understanding and retention.

- Sub-requirement 19.1: The quiz should cover the topics included in the study plan.
- Sub-requirement 19.2: Quiz results should provide insights into areas of strength and weakness.
- Requirement 20: The system should provide re-study suggestions based on the quiz results and overall performance in the personalized study plan.
 - Sub-requirement 20.1: Re-study suggestions should prioritize topics where the user demonstrated weaknesses.
 - Sub-requirement 20.2: Users can customize and adjust re-study suggestions based on their preferences.