The Open University of Sri Lanka
Department of Electrical and Computer Engineering
EEI 4267 – Requirement Engineering
Mini Project

Section C
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Functional Requirements

Functional requirements are the specific features, behaviours, and functionalities that a software system must provide to satisfy the needs of its users. These requirements describe what the system should do, in terms of its inputs, processing, and outputs. Functional requirements are usually documented in detail as part of the system requirements specification and serve as the basis for the design and implementation of the system.

Driving School Management System (DSMS) is a Web based Application which will be Accessible by the management of a driving school for their efficient work.

Here The functional Requirements of a driving school has been specified by into following modules.

01. Student Module:

- **Registration and document upload:** Students should be able to register for the driving school and select a branch location then, can submit relevant documents such as medical certificate, birth certificate copy, national ID copy, and photos at the selected branch of the driving school.

- **Student login and dashboard:** The system should allow students to log in to their accounts and view their dashboard, which displays exams details, test results, training sessions, and driving tests.

- **Exam scheduling and tracking:** Students should be able to view their exam schedule and track their progress throughout the exam process.

- **Training schedule and progress:** Students should be able to view their training schedule, track their progress, and communicate with their assigned instructor.

- **Learner's permit management:** Students should be able to download and print their learner's permit after successfully completing the written and practical driving exams.

- **Communication and notification:** Students should be able to communicate with their assigned instructor and receive notifications about upcoming events, deadlines, Payments, and updates.

02. Staff Module:

- **Staff login and dashboard:** The system should allow staff members to log in to their accounts and view their dashboard, which displays a summary of their tasks and responsibilities.

- **Student registration management:** Staff should be able to manage student registrations, including verifying and uploading documents, accepting payments, and assigning students to specific instructors.

- **Exam scheduling and tracking:** Staff should be able to schedule written and practical exams, track student progress, and upload exam results to the system.

- **Training management:** Staff should be able to schedule and manage training sessions, assign instructors to specific students, and track the progress of each student's training.

- **Reporting and analytics:** Staff should be able to generate reports and analytics to help monitor the overall performance of the driving school, track student progress, and identify areas for improvement.

03. Instructor Module:

- **Instructor login and dashboard:** The system should allow instructors to log in to their accounts and view their dashboard, which displays their assigned students and training schedule.

- **Student assignment and progress tracking:** Instructors should be able to view their assigned students, track their progress, and communicate with them through the system.

- **Training management:** Instructors should be able to manage their training sessions, track attendance, and upload progress reports to the system.

- **Communication and notification:** Instructors should be able to communicate with their assigned students and receive notifications about upcoming events, deadlines, and updates.

04. Admin Module:

- **Admin login and dashboard:** The system should allow admin users to log in to their accounts and view their dashboard, which displays a summary of the driving school's performance and key metrics.

- **Staff management:** Admin users should be able to manage staff accounts, assign roles and permissions, and track their performance.

- **Student management:** Admin users should be able to manage student accounts, track their progress, and communicate with them (SMS Alert) through the system.

- **Reporting and analytics:** Admin users should be able to generate reports and analytics to help monitor the overall performance of the driving school, track student progress, and identify areas for improvement.

- **System configuration and settings:** Admin users should be able to configure system settings, such as payment methods, exam formats, and training materials.

Non – Functional Requirements

   Non-functional requirements are the characteristics and qualities that a software system must possess but are not directly related to its specific functionality. They define how well the system should perform, rather than what the system should do.

Here are the Non – Functional Requirement has been specified in our **Driving School Management System (DSMS)**

01. **Usability and accessibility requirements:** The system should be user-friendly, with an intuitive interface and clear instructions.

02. Performance and Load Requirements:
- The system must be able to handle many users without slowing down or crashing.
- The response time for each action should be less than 3 to 5 seconds.
- The system must be able to handle a large number of file uploads and downloads, such as images and documents.

03. Compatibility Requirements:
- The system must be compatible with all major web browsers, such as Chrome, Firefox, Safari, and Edge.
- The system should be compatible with different devices, such as desktops, laptops, tablets, and smartphones.
- The system must be compatible with different operating systems, such as Windows, macOS, and Linux.

04. External Interface Requirements:
- The system should be integrated with a payment gateway to allow students to make payments online securely.
- The system should be able to send email notifications and SMS alert to students, instructors, and staff members for various events, such as exam dates, training schedules, and payment reminders.
- The system should have a chat feature to enable students to communicate with instructors and staff members.

05. Security and Authentication Requirements:
- The system must ensure the security of student and staff data, including personal information and payment details.
- The system must provide secure login and registration mechanisms for students, instructors, and staff members.
- The system should implement role-based access control to restrict access to certain features and data based on the user's role.