DriverPass Business Requirements Document

# System Components and Design

## Purpose

## • The aim of this initiative is to create a complete online and in-vehicle instructional program for DriverPass clients.

## • DriverPass is designed to help the average student pass their DMV driving tests. They are the direct-to-consumer division of the Engage Learning Group, which has been in the business of creating interactive K-12 curricula for over a decade.

## System Background

## An online platform is wanted by the client to facilitate the enrollment of students in training packages, the booking of driving lessons, and the taking of practice tests.

## • The system will be accessed by customers through web or mobile browsers; administrators and staff will access the system through web or mobile browsers, too but with specific role-based permissions.

## • Accurate management of reservations is a prerequisite, as is the timely generation of reports. These reports must inform us about tracking student progress and monitoring activity within the system.

## Objectives and Goals

# Allow customers and staff to register and log in securely.

# Allow learners to:

# Select and obtain training programs.

# Arrange, change, and call off driving instruction sessions.

# Complete exams in an online proctored setting.

# Track exam scores and their relevant changes over time.

# Utilize various methods of organization for exam preparation.

# Staff are allowed to:

# Organize appointments, tutoring schedules, and package availability.

# Monitor the advancement of students and notes from instructors.

# Ensure that training materials are in sync with DMV regulations through updates.

# Requirements

## Nonfunctional Requirements

### Performance Requirements

### • Cloud system based on web technology and accessible via web browsers.

### • The loading time should not surpass 2 seconds.

### Initial request: Account maintenance tasks include the following.

### • Providing monthly updates

### • Making necessary updates based on content from the DMV

### • Making style edits

### • Making all necessary changes in ContentStudio.

### Platform Constraints

### Works with Chrome, Safari, Firefox, and Edge.

### • Responsive on mobile and desktop.

### • The database and web server are required for the back end.

### Accuracy and Precision

### • Access control for roles that include admin, IT, secretary, instructor, and student.

### • You can quickly ascertain whether or not a user has caps lock on.

### • When the user is logged in, their login status is remembered for the next time.

### • The system times out after a period when there has been no activity.

### • A user can request a new password.

### • After several unsuccessful attempts to log in or when data problems arise, alert the admin.

### Adaptability

• Packages can be disabled or accounts can be blocked by the IT admin.

• Data for users is managed without changing code.

• The UI and security patch updates must be supported by the system.

### Security

## • To log in, one must provide an email address and a password; secure email is used to reset passwords.

## • Protection against brute force: Accounts are locked after 5 unsuccessful login attempts.

## Two-factor authentication is enabled.

## • Use HTTPS for secure communication.

## Functional Requirements

## • The user credentials provided at login shall be validated by the system.

## • The system will distinguish customers, instructors, and administrators.

## • Password reset through email verification shall be allowed by the system.

## The system will show package choices and permit acquisitions.

## • The system will permit the planning of two-hour classes and the allotting of drivers and vehicles.

## The system will monitor the status, score, and name of student tests.

## • The system must permit the administrator to turn off packages.

## • The system shall keep a record of instructor remarks and timing of sessions and shall also show this information.

## • The DMV shall sync updates with the system and notify users.

## • Generate reports of activities and appointments that can be printed.

## User Interface

## • Available through both desktop and mobile web browsers.

## • Customer Interface:

## - Sign up/sign in, see progress, plan sessions, complete quizzes, see driving reminders.

## • Administration Interface:

## Control users, schedule lessons, and make packages available.

## • Instructor Interface:

## • New user dashboard and notifications.

## • Ability to add/remove students from the course roster and track student progress across various course sections and types.

## • System navigation improvements.

## • Ability to upload and share multimedia course content with students.

## - View schedule, add session notes.

## • Secretary Interface:

## - Schedule appointments, enroll new students, and consult calendar.

## Assumptions

## • Users possess a dependable internet connection and fundamental technological understanding.

## • Training is done for the admin and IT staff on backend operations.

## • Scheduled sessions will have drivers available.

## Limitations

## • Restriction of only 10 vehicles has a direct effect on how much of a schedule can be adhered to (capacity).

## • Downloadable reports or test content are the only materials available for offline access.

## • Requires cooperation from the DMV for update feeds.

## • User Volume: High user volume may necessitate planning for server scalability.

## Gantt Chart

See chart below:

