
Software Requirements Specification

For

Online Wisdom

e-Learning App

Version 1.0

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Revision History

Name	Date	Reason For Changes	Version
Deji Ogundiran	19/6/2018	Initial version	1.0

Signatures

Role	Name	Signature	Date
Author			
System Owner			
Quality Assurance			

1. Introduction

1.1 Purpose

This is the User requirements Specification for an e-Learning application, for use by Online Wisdom

The User Requirements Specification for the Digital security e-Learning application states the business needs for what is required from the Digital security platform. These requirements will assure that the e-Learning application will correctly and reliably perform its intended functionalities.

1.2 Glossary

Server	A computer which manages access to a centralized resource or service in a network.
Virtual Private Server	A virtual private server (VPS) is a virtual machine provided as a service by a provider. A VPS runs its own copy of an operating system, and administrators will have super-user-level access to that operating system instance, so they can install almost any software that runs on that OS. For the purpose of this document, server and VPS will be used interchangeably.
Web Server	A Web server is a program that uses HTTP (Hypertext Transfer Protocol) to serve the files that form Web pages to users, in response to their requests, which are forwarded by their computers' HTTP clients.
Database	A structured set of data held in a computer, especially one that is accessible in various ways
Database Server	A database server is a computer program that provides database services to other computer programs or to computers, as defined by the client-server model.
Mobile App	A software package designed to run on smartphones and other mobile devices
User Interface	The means, by which the user and a computer system interact, in particular, the use of input devices and software.
Secure Shell	Secure Shell (SSH) is a cryptographic network protocol for operating network services securely over an unsecured network. The best known example application is for remote login to computer systems by users.
Encrypt	Convert (information or data) into a code, especially to prevent unauthorized access.
App	An application that allows user interaction for further processing, it can be a mobile app or a web app

IOS	A mobile operating system that runs on iPhone and iPad devices
Android	A mobile operating system for android devices
API	Application Programmable Interface, it provides interface for third party integration into the main platform

1.3 Intended Audience

This document is intended for the project manager, business analyst, developers, technical representatives, key users and testers.

1.4 Product Scope

This User Requirements Specification applies to the digital security platform. This document addresses the functions the e-Learning application must be able to perform successfully to enable Online Wisdom successfully manage her digital security training clients.

2. Overall Description

2.1 Product Perspective

Online Wisdom e-Learning Application is an online learning platform that will be designed to function in similar way to UDEMY. It allows users to subscribe for available digital security classes using their mobile app on their phone, users can also view the content of the classes using a regular computer/laptop via their internet browser. Lectures can be downloaded but will only be accessible via the application.

Online Wisdom e-Learning Application will present users with a table of content for each course to help them make a decision to either subscribe for the course or not. Payment for the courses will mostly be made online or by direct debit to the card of the subscribers. The e-Learning Application sends invoice to subscribers once payment has been made and also allows them to check their subscription history at a future date

Asides allowing subscribers to access content like UDEMY, Online Wisdom e-Learning Application would have API accessible for content partners who subscribe to platform on an enterprise level agreement, allowing them to provide white labelled content to their own users.

Online Wisdom e-Learning Application will include a web platform where the administrator can manage the content as well as users and

On completion, Online Wisdom e-Learning Application will stand out on ease of use, maintenance, security as well as ease of integration for enterprise users.

2.2 Product Functions

The application, when fully developed will have the following features:

- Discovery of classes as they are made available by administrator
- Manage subscription for classes
- Billing and payment for subscription
- Manage enterprise level subscribers and their accessible content
- Allow Clients of enterprise subscribers report issues to their parent administrator
- Provide support interface between enterprise subscribers and Online Wisdom
- Manage users, authentication and authorization

2.3 User Classes and Characteristics

Below are the classes of users that will use the app and the functions they will carry out.

- Administrators: Have access to all the operations of the system. They are responsible for managing users' accounts, access control, push updates to subscribers as well as manage classes and content. They will be provided with modules that gives them a full control of the platform. Most of their modules will be web based and can be accessed from any location
- Subscribers: They will be have access to browse through the catalogue of courses provided on the platform, Subscribe to their desired courses, watch video and download other resources as made available by the administrator. Subscribers would primarily interface with the platform using the IOS or Android APP, however, they can still access the web platform at their convenience
- Enterprise Subscribers: This level of subscribers would have dedicated interface to manage courses available on their own custom platform. Their users will also be provided with endpoint to request support or provide report to their parent account

2.4 Operating Environment

Online Wisdom e-Learning Application will be made up of the following subsystem

1. IOS App: This app allows **iPhone and iPad** users to access content, manage their class subscriptions as well as get up to date information from the administrator
2. Android App: This app allows **Android** users to access content, manage their class subscriptions as well as get up to date information from the administrator. It will be downloadable from google playstore
3. Web Platform: This is the base engine for all interaction. It allows administrator to monitor service, configure the platform as well as provide control over the platform

4. API: This is the point of integration for the mobile apps as well as content distribution point for enterprise subscribers

The app will run on the following platforms;

- Android OS 4.1 and above
- IOS
- Web

2.5 User Documentation

A user manual will be provided to guide administrators on how to use and maintain the platform

2.6 Assumptions and Dependencies

This specification makes the following assumptions;

- Users of the app are literate, are familiar with the use of the internet, mobile app, and web applications.
- All designated users have access to a mobile device or computers with internet connection
- Users will not divulge their login credentials to anyone

3. External Interface Requirements

3.1 User Interfaces

The Online Wisdom e-Learning Application shall be a mobile app and web based solution hence its user interface will be accessed through the application interface and any browser by downloading and installing the app or by navigating to a URL that will be provided. After login in, the user will be taken to the app space which consists of a side menu panel with collapsible sub menu items. The screens for each menu will be loaded on the display area.

The app will have the following logical interfaces;

- a. Registration interface to register new users of the app
- b. A login in screen to authenticate users
- c. Interface to discover and subscribe to classes
- d. User management screen to create/manage user accounts and access control
- e. Interface to manage non-transactional data and controls

4. System Features

Some features of the app as understood from user requirements are as follows.

4.1 User Registration

Creating a new user on the platform is really simple

- New users can create account
- Registration acknowledgement and approval
- Moderation of User role by the administrator

4.2 Log-in and Log-out

Log-in will be done using the login details created at registration.

- Login as an enterprise subscriber is based on pre-approval by admin
- Login to app as customer with verified credentials
- Login via web as customer with verified credentials

4.3 Notifications

Guaranteed notifications are enabled through app notifications and alerts.

- When new contents are available
- When there is an ongoing promo
- When payment is completed by a user
- When administrator has a message to pass across to users

4.4 Configurability

A high level of configurability and usability is given to the app.

- Role-wise access
- Notifications by way of email and app notifications
- Help available at by way of Support pages, FAQs and User guide options

4.5 Payment management

The Digital security platform extends its functionality beyond moderating classes and content to

- Add billing information
- Automated billing based on user subscription

- E-receipt generation on payment

4.6 Security features

User accounts are secured from unwanted intrusions by properly defining access and authorization level for platform users.

- Audit trail
- Access restriction based on user class

4.7 Reporting

The platform would allow users to report any technical challenge or other support requested directly to online wisdom. It would also provide enterprise subscribers with endpoints to manage request for support from their sub users

- Create Support Ticket
- View Update on incidence
- Mark incidence as resolved or still pending
- Escalate issues that are not closed on time

5. Other Nonfunctional Requirements

5.1 General Requirements

- Report Generation: A Report Generation tool will be provided for generation of reports. Reports can be generated daily, weekly, and monthly as when needed and can also be exported to Microsoft Excel.
- Search Tool: This is a system wide tool to help users find what they need faster
- Audit Trails: This will be used to log all activities on the app and can be accessed by Online Wisdom Group authorized personnel
- User Admin Dashboard: A User Administration Dashboard will be provided for managing users.
- Access Control List (ACL): An ACL tool will be provided for assigning roles and responsibilities to staff where applicable
- Three Layer Security: Operating System - Level security, Database level security and application level security.

5.2 Performance Requirements

- Online Wisdom e-Learning Application needs to be able to process request in timely manner given that internet connection speed is not constrained.
- The system needs to be able to handle requests from hundreds of concurrent users

5.3 Safety Requirements

- The system database needs to be backed up frequently and backup files will be kept for agreed period.

5.4 Security Requirements

- All HTTP requests to the application are authenticated
- Users are only authorized to perform functions that their assigned roles grant them access to
- The server in which the database will reside, should only be accessed through an encrypted communication such as Secure Shell (SSH).