SOFTWARE REQUIREMENTS SPECIFICATION

FOR

Online Stock Photography & Stock Footage Market

Prepared By: AS 471- Group 1

Faculty of Science, University of Peradeniya

Introduction	3
Purpose	3
Scope of Development Project	3
Definitions and Abbreviations	3
References	4
Books	4
Websites	4
Project Architecture and Description	5
System Overview	5
Operating Environment	6
Assumptions and Dependencies	6
Assumptions	6
Dependencies	6
Functional Requirements	7
User Stories	7
As a admin	7
As a user	8
Non Functional Requirements	9
Performance Requirement	9
Safety Requirement	9
Security Requirement	9
Requirement attributes	10
Business Rules	10
User Requirements	10
Software Quality Attributes	11
External Interface Requirements	11
Requirement for Deployment	11
Software Configuration	11
Hardware Configuration	12
Communication Interfaces	12
Graphical User Interface Requirements	12

Introduction

Purpose

The main objective of this document is to illustrate the requirements of the project. This document gives the detailed description of the both functional and non-functional requirements proposed by the client. The purpose of this project is to develop a website that can be used by the photographers / graphic designers (our client) to upload their photos and design templates. The main purpose of this project is when a person needs a photograph or a designed template they can search by the category and download the item they wish. For premium contents the users can make a payment and download the necessary ones. This project describes the hardware and software interface requirements using different diagrams.

Scope of Development Project

This web site is very important for those who love photography and graphic design. The photographers and the graphic designers who are the owners of the website can upload various types of design templates, photographs into the web site. The photographer can upload file formats like jpg files not only but also the graphic designers can upload vector files, illustrations in different qualities and different types of file formats.

The photographer sells photos at different prices. But anyone can get the photos with or without payment. Also graphic designers can sell their design and template by this site. Customers can choose file format, size, resolution and other options before downloading the design templates.

The project can be easily implemented under various situations. We can add new features as and when we require, making reusability possible as there is flexibility in all the modules. The languages used for developing the project front end is react and back end are node.js and mongodb. These languages are quite advantageous than other languages.

Definitions and Abbreviations

SRS -> Software Requirement Specification

SSL -> Secure Sockets Layer

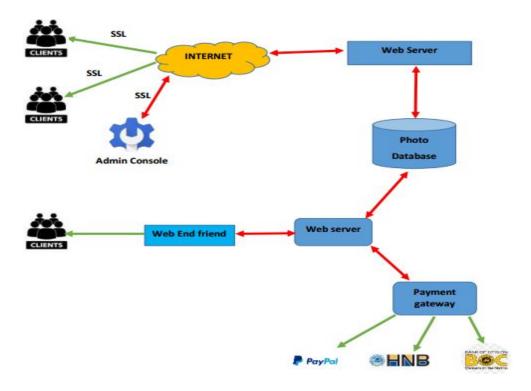
References

Websites

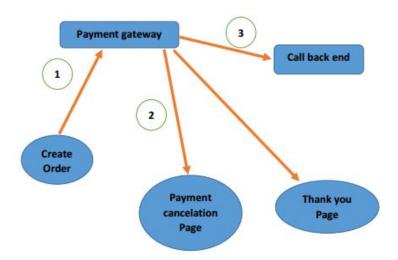
- https://www.shutterstock.com/
- https://www.freepik.com/
- https://github.com/iamshaunjp/firegram

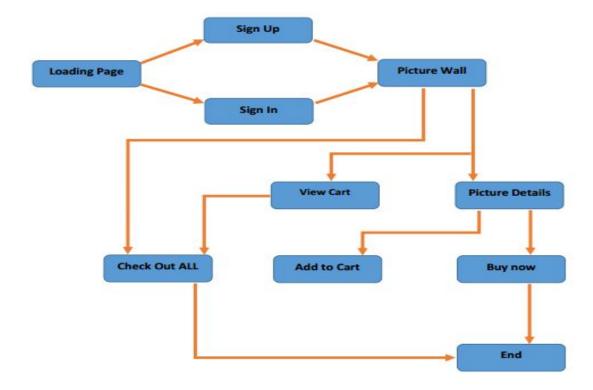
Project Architecture and Description

System Overview



Flow chart





This is a diagram of the project for a web page of Online Stock Photography & Stock Footage Market. In this web page, photographers, designers and anyone who like to this field can be accessed as users to this web page. This architecture is a client server architecture. Users can connect to the interface or content of a web page using the internet. In here, User must first create an account before accessing a web page. A **Sign Up** option can be used for it. Users who already have an account can access the web page through the **Sign In** option. Then users can see the photographs wall and also get the details of each photograph to user, then using details of the picture option. If a user wants to get a photo from this web page, he can add the photo of his choice to the cart related to his account. After adding the picture to the cart, the user can check the his order is corrected. Then the user can pay the money for his order. Here developers use the third party payment method. Because payment methods are paypal, BOC online payment, HNB online payment, etc. After creating the order, the user can pay the money for it, but any error issues in order the user can cancel his payment.

Operating Environment

The product will be operating on any platform. The online stock photography and stock footage market is a website and shall operate in all famous browsers, for a model we are taking Microsoft Internet Explorer, Google Chrome, and Mozilla Firefox. Also, it will be compatible with IE 6.0. Most of the features will be compatible with the Mozilla Firefox & Opera 7.0 or higher version. The only requirement to use this online product would be an internet connection. The hardware configuration includes. The basic input devices required are keyboard, mouse, and output devices are monitor, printer, etc.

.

Assumptions and Dependencies

Assumptions

- The system should be user-friendly so that it is easy to use for users.
- accessible by the website.
- The system should have more storage capacity and provide fast access to the database.
- The system should provide search facilities and support quick transactions.
- The System is available anytime.

Dependencies

- The specific hardware and software due to which the product will be run on the basis of listing requirements and specification.
- The users should have a proper understanding of the system.
- The new users are to be recorded to the database and the real information must be entered

Functional Requirements

User Stories

A **user story** is a short, simple description of a product feature from the perspective of the person who wants to use the new feature, usually a **user** or customer of the product.

Online stock photography & Stock footage market system

Actors	Admin : Responsible for hosting the application, managing resource persons, uploading the materials, managing server side.
	Users: Who views the application and buys the products

As a admin

Туре	Epic	User Story	Expected Outcome
Admin Login	I want to log into the system using my username and password	I can view the admin dashboard to manage everything	
		I want to reset my password, when I forget it.	I can use a new password.
Admin	Managing the Store	I want to add new products of my own.	Products are shown in the store.

		I want to make changes of the product details	I can see the changes which are changed. (eg : price, description etc)
		I want to remove some of my products.	I can remove unnecessary products.
Admin	Managing the Users	I want to get the users list and search for their details.	I can view all users. I can find any user and see their details (personal details and)
		I want to ban a user subscription if necessary	A user can be permanently removed from the database.(eg: fake users, robots)
		I want to view user details via chat room.	I can contact any user if necessary.
Admin	Orders management	I want see the current orders	I can see the current order list which is ordered by users.
		I want to see the completed orders.	I can see the delivered orders list as a table.
		I want to see the incomes	I can see the current income in graphical representation.(As daily, monthly, yearly)

As a User

Туре	Epic	User Story	Expected Outcome
User	Sign up	I want to be a user of the website.	I can login and get into the dashboard.
	Login	I want to log into my account using my username and password.	I can see the homepage and have access to browse,order and pay.
User	Browse the store	I want to view all the Products.	I can see every product that listed by the admin
		I want to filter out the products	I can see products which I filtered.(eg: Categories, Free or Premium, Latest, Trending etc.)
		I want to rate or review items.	I have access to Rate and review the items.
User	Order a product	I want to buy some product/s. I want to move some products to my cart.	I can see products in the cart.
		I want to remove my order from the cart.	I can see available items in the cart.
		Proceed for payment	I can see payment details form
		I want to download the ordered products.	I can get the direct download link.
User	Chat Room Service	I want to report any content, problems and issues.	I can contact the admin if necessary. I can make suggestions and complaints to the admin via chat room.
		I want to provide feedback for items/services.	

Non Functional Requirements

Performance Requirement

The website that we are going to develop, must be designed to satisfy customers. The performance requirements are an important role for that. Therefore, it is expected that would perform functionally all the requirements that needs of the user more than expected.

- The performance of the system should be fast and accurate.
- The system should be able to handle most features that are relevant to website such as format size, resolution etc.
- It should work smoothly to use 1000 users without any faults at the same time.
- Average response time should be less than 2 second.
- If something goes wrong with the system, it will be reorganized within 30 seconds.

Safety Requirement

• Backups of the databases should be done hourly and be kept for one week.

Security Requirement

- The system shall permit only staff members who are on the list of authorized administrators to create or edit items.
- The system shall permit users who are not project managers or administrators to view.
- Users shall be required to log in to the system for all operations.
- Users cannot share credentials.

Requirement attributes

- There may be only one admin creating the project, and will have the right to create changes to the system. But the members or other users cannot make changes.
- The project should be open source.
- The Quality of the database is maintained in such a way so that it can be very user friendly to all the users of the database.
- The user is able to easily download and install the system.

Business Rules

A business rule is anything that captures and implements business policies and practices. A rule can enforce business policy and make a decision. This includes the rules and regulations that the system users should abide by. This includes the cost of the project and the discount offers provided. The users should avoid illegal rules and protocols. Neither admin nor member should cross the rules and regulations.

Additional Facilities For User

The users of the website are customers & administrators who upload the images to the website & maintain the website. The customers are assumed to have basic knowledge of online shopping. The administrator of the website should have more knowledge on uploading image stock, receiving payments and be able to rectify the problems that may arise due to image uploading failures, payment gateway failures, display errors & other website failuers. The proper user interface, user manual, online help & guide must be sufficient to use the website without any problem.

The admin provides certain facilities to the customers in the form of,

- Forgot Password
- Data migration i.e. whenever customer registers for the first time then the data is stored in the server
- Content Management
- Enhanced Shopping
- Payment Gateway

Software Quality Attributes

- AVAILABILITY: The images should be available in specific name & specified category as many customers are doing advanced search
- PERFORMANCE: Web store responds quickly to customer requests
- SAFETY: Secure payment & secured money transaction options. (when typing card number or OTP, hackers will not be able to get the passwords)
- USABILITY: User friendly interface with simple workflow
- MAINTAINABILITY: New developers should be able to understand the configurations and coding easily
- RELIABILITY: Ensure that the web site has very low downtime.

External Interface Requirements

Requirement for Deployment

Software Configuration

This software package is developed using javascript as the front end which is supported by the Node.js framework. MongoDB as the back end to store the database.

Operating System: Windows XP/Vista/7/8/10

Language: JavaScript, HTML

Frameworks: NodeJs, Express, CSS.

Database: MongoDB

Hardware Configuration

Processor: Pentium(R)Dual-core CPU

Hard Disk: 40GB

RAM: 256 MB or more

Communication Interfaces

This web application supports all types of web browsers. It can be accessed by any device with a proper internet connection.

Graphical User Interface Requirements

The software provides a separate graphical interface for the user and the administrators.

- It allows users to view all the products available in the store whether they are free or not free.
- Login in is necessary to download the premium products and users can get the full experience with the logged on interface of the user

- The user interface can be customizable by the administrator
- All the modules provided with the application must fit into this graphical user interface and accomplish to the standard defined
- The design should be simple and all the different interfaces should follow a standard
- The user interface should be able to interact with the user management module and a part of the interface must be dedicated to the login/logout module and online payment options.