**NAME**

**Software Requirement Specifications**

**(SRS)**

Preface

This document represents the Software Requirements Specification for the ***Name***. The document begins with an Introduction section that describes the purpose of the document and what is considered to be in the scope of this document as well as what is outside the scope of this document.

The next section is an Overall Description of the requirements and functions. This section includes the overall constraints that the project is working within as well as the assumptions made by the project as far as the defining the requirements is concerned. Lastly, the project dependencies are also listed in this section.

The Specific Requirements section comes next and is the most important section of this document. This section goes into detail about each specific requirement of the Electronic Stamp project. A description, use case with sequence of events, and any related requirements is given for each requirement. This section also gives a detailed description of the External Interfaces for the project including a description of the user interface for the software.

The Specific Requirements section also describes the Performance Requirements that are to met by the Electronic Stamp solution. Design Constraints and Standards Compliance are also considered in this section. Lastly, various System Attributes are discussed including Maintainability, Security, and Portability.

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1. **Introduction** 
   1. **Purpose**

The purpose of the Software Requirements Specification is to describe the specific requirements of the Cloud Storage project that are to be met by the implementation effort of our team. Included with the description of the requirements is a description of any constraints or assumptions that the project is working within.

This document also provides a description of any project dependencies that need to be explicitly expressed. Along with the requirements descriptions, it is also the purpose of this document to describe any performance requirements that need to be met. If there are any standards that need to be considered when developing the software are also listed.

Lastly, the purpose of this document is to communicate the system attributes of the Cloud Storage. These system attributes include reliability, availability, scalability, maintainability, and portability.

**1.2 Scope**

It is within the scope of the Software Requirements Specification to describe the specific system requirements of the Electronic Stamp project. This would include performance requirements, system constraints, and project assumptions. Any specific detail that is needed about the standards or technology used to define these requirements, constraints, and assumptions are within the scope of this document.

It is outside the scope of this document to describe why the regular torrent downloading is inefficient systems and technology or the general problem with unwanted same pc storage. It is also outside the scope of this document to describe in any detail at all how certain mentioned standards or technologies work and operate.

## Definitions, Acronyms, and Abbreviations

Table of Definitions, Acronyms, and Abbreviations

|  |  |
| --- | --- |
| **Definition, Acronym, or Abbreviation** | **Description** |
| SRS | Software Requirements Specification. |
|  |  |
|  |  |

1. **Overall Description**

**2.1 Product Perspective**

­­The Cloud Storage project is stand-alone software developed by our team. It however uses several already implemented techniques of Virtualization, Torrents, Transmission Client and other web scripting languages. The Cloud storage project extends the usage of the torrents to our cloud based storage.

The cloud storage will be provided by the Digital Ocean and will use the infrastructure provided by them. Our team would virtualize the OS and other dependencies required for the download and storage in an accessible manner.

By doing this the standard storage service of Digital Ocean would be extended to the regular non-technical users in the form of torrent downloading and storage.

**2.2 Product Functions**

| **ID** | **Origin** | **Shall Requirement** |
| --- | --- | --- |
| 1 | *Project Description Document* | The user SHALL be able to create an account with his username and password using a standard regex for security. |
| 2 | *Project Description Document* | The user SHALL be able to upload links in the link upload bar. |
| 21 | *Project Description Document* | The transmission client SHALL download the uploaded link. |
| 22 | *Project Description Document* | The downloaded link SHALL be stored in the set directory. |
| 23 | *Project Description Document* | The incomplete files SHALL be kept in other directory and won’t be visible to the users. |
| 24 | *Project Description Document* | The user SHALL be able to manage the downloaded files. |

## Constraints

The follow is a table of the design constraints that the system SHALL meet. The list of constraints was produced from the initial project documentation provided by the requirements expert.

Table of Design Constraints

| **ID** | **Origin** | ***Shall Requirement*** |
| --- | --- | --- |
| *1* | *Project Description Document* | *The user SHALL not be able to see the number of seeders for the torrent.* |
| *2* | *Project Description Document* | *The user SHALL not be able to see the number of leachers for the torrent.* |
| *3* | *Project Description Document* | *The user SHALL be able to only see the upload/download speed only.* |
| *4* | *Project Description Document* | *The system SHALL not stop the user from downloading a torrent even if it will exceed storage at its completion. It will only stop after it has reached the limit.* |
| *5* | *Project Description Document* | *The system SHALL not monitor the content downloaded by the users for duplicate instances.* |
| *6* | *Project Description Document* | *The system SHALL use the existing framework of Digital Ocean servers.* |
| *7* | *Project Description Document* | *The system SHALL use the existing technology of the Transmission Client.* |
| *8* | *Project Description Document* | *The user shall not be able to change the* |
| *9* | *Project Description Document* | *The system SHALL not stop/start any download unless the storage limit has been reached.* |
| *10* | *Project Description Document* | *The system SHALL not show the files in the download area which are currently being downloaded.* |
| *11* | *Project Description Document* | *The system SHALL not monitor the type of the content being downloaded by the user.* |
| *12* | *Project Description Document* | *The system SHALL not defend itself from virus and harmful downloads* |