Software Requirements Specifications

Videogram

1.0.0

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**1 INTRODUCTION**

**1.1 Document Conventions**

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| **AWS** | Amazon Web Services |

**1.2 Product Overview**

The product being developed is a software application that allows users to easily share photos and videos with friends. The product utilizes three main software components, being a database, back end application, and front end UI.

**2 SPECIFIC REQUIREMENTS**

**2.1 External Interface Requirements**

2.1.1 User Interfaces

* User interface shall run on any mobile device supported by AndroidOS, Windows Phone, or iOS. Not compatible with non-mobile devices (with the exception of emulators).
* The user interface shall be user friendly, simplistic, familiar, and pleasing to look at.
* The user interface shall comply with mobile UI accessibility standards. (WCAG)

2.1.2 Hardware Interfaces

* Mobile phone and tablet.

2.1.3 Software Interfaces

* The database shall utilize AWS for database hosting.
* The database shall interface with the back end application by transmitting JSON data.
* The back end application shall interface with the front end UI.

2.1.4 Communication Protocols

* The back end application shall utilize the Hypertext Transfer Protocol (HTTP) to interface with the database.
* The back end application shall send HTTP GET requests to the appropriate AWS url to query data from the database.
* The back end application shall send HTTP POST requests to the appropriate AWS url to insert data into the database.

**2.2 Software Product Features**

2.2.1 Description

Product features shall include user authentication, video sharing, and video viewing.

2.2.2 Functional Requirements

* The software shall require a user account for any operation.
* The software shall require user authentication upon startup.
* The software shall provide an option allowing a user to find other users.
* The software shall provide an option allowing a user to share a video.
* The software shall store any video that is uploaded by a user.
* The software shall present any videos of any specified user.

**2.3 Software System Attributes**

2.3.1 Reliability

* Extremely minimal application crashing.
* Minimal latency between backend and frontend

2.3.2 Availability

* The software shall be available for mobile devices only.

2.3.3 Security

* The software shall ONLY collect the following personal data:
* Username
* Password
* Email
* Full Name
* Biography
* The software shall not use any personal data collected for a user outside of the scope of the application.
* The software shall not share any personal data collected for a user with any 3rd party systems.
* The software shall erase any personal data collected for a user upon account deletion.
* The software shall not use any uploaded photos/videos for a user outside of the scope of the application.
* The software shall not use any uploaded photos/videos for a user with any 3rd party systems.
* The software shall erase any uploaded photos/videos for a user upon account deletion.

2.3.4 Maintainability

No maintainability requirements.

2.3.5 Portability

* The software shall run on AndroidOS, Windows and iOS systems.

2.3.6 Performance

* The database shall respond to any necessary UI requests within 5 seconds or less.
* The front end UI shall parse and apply backend responses within 5 seconds or less.
* Video Streaming quality standards shall include:
* 30 Frames Per Second
* 1080px720p HD
* 256kbps audio stream

2.3.7 Safety

* The database shall not be deleted or destroyed, only changed in form.

**2.4 Database Requirements**

* The database shall be set up so that no anomalies exist.
* The database shall store the following user personal data:
* Username
* Password
* Biography
* Email
* Full Name
* The database shall store links to the following user media data:
* Profile picture
* Uploaded Videos
* The database may store the following user uploaded video data:
* Description
* Location
* Date
* Tags
* Length
* Quality
* Likes
* Comments