## COMSATS University Islamabad, Vehari Campus



**Software Requirement Specification**

**for**

# Real and Fake Face Classification

## *By*

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# Software Requirement Specification (SRS)

## Requirement Analysis

The software requirement specification document (SRS) is the description of the software that is to be developed. In order to meet the requirements, developers need to have a clear and thorough understanding of the software that is going to be under development. This is achieved through detailed and continuous contact with the project team and users throughout the software development process. Software requirement specification (SRS) establishes an agreement between the client and developers on how the software should function. It also provides the schedule, risks and cost in the development of the software. It puts forward functional and non-functional requirements, it may include set of use cases that describes how the user will interact with the software. The software requirements document (SRS) includes the sufficient and necessary requirements for the development of this project.

* Expected Requirements
* Functional Requirements
* Non-functional Requirements
* Software Requirements
* Technical Requirement

**Expected Requirement:**

The expected requirements of the project are explained below

* User expect good efficiency in detecting the faces.
* System will be accurate in term of detection

**Software Requirement:**

The software requirement for the development of the project is:

* Anaconda
* Jupyter Notebook
* HTML
* CSS

**Technical Requirement:**

In this project our technical requirement is to train our model on the specific dataset and make our model capable to detect real and fake faces.

## Functional Requirements

### System:

Our software is applicable for a specific organization.

* Deep learning model employed for the identification of real or fake faces from the original ones.
* The softmax loss function is utilized to give the binary output, the processed image is real or fake.
* Computer vision augmentation techniques are utilized to remove to improve their performance like rotation, zooming and noise removal.
* The system facilitates them from security crises like a fake license or fake identification.

### API Configuration:

* Our system facilitates the user interface with backend HTML connectivity.

### User:

* User can interact with our web page easily as it is simple and easy to understand.

## Non-Functional Requirements

* Our real and fake face detection system ensure reliability in terms of bugs and fault.
* The dataset must be scalable to adopt a growing number of users.
* Provide an accurate response to the input
* System Interface should be easy and attractive to use.

## Flowchart

Diagram

Description automatically generatedBasic Flowchart for the system, how the system shall actually work: