Software design document for image-based web scraping software

Version 0.6

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# Revision history

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| Version | Author | Description | Date |
| 0.1 | Ahmed M. Abd El-Ghani | Initial | 6-6-2018 |
| 0.2 | Ahmed M. Abd El-Ghani | Introduction | 7-6-2018 |
| 0.3 | Ahmed M. Abd El-Ghani | overall description | 8-6-2018 |
| 0.4 | Ahmed Agamy | specific requirement | 13-6-2018 |
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| 0.6 | Ahmed M. Abd El-Ghani | specific requirement | 14-6-2018 |
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# Introduction

## Purpose

The purpose of this document is to present a detailed description of the designs of image-based web scraping software, Firstly, this document is intended for the Team, to use the designs as guidelines to implement the project. Lastly, this document could be used for designers who try to upgrade or modify the present design of the system.

## Scope

This software system will be web scraper that uses image to search web sites, it will be designed to minimize the time taken to collect information about product category in an online e-commerce platform, it will only need a picture or text of that product (ex: mobile picture), And it will provide an easy to read report that contain links ,prices and names of that product from a list of online market websites, this report can be tremendously useful in market evaluation witch is an important part of visibility study, it also can be use full for searching and facilitating purchase from most of online e-commerce platforms.

## References

* *IEEE Standard 1016-1998, IEEE Recommended Practice for Software Requirements Specifications, IEEE Computer Society, 1998.*

## Overview

This document is written according to the standards for Software Design Documentation explained in “IEEE Recommended Practice for Software Design Documentation”.

The next chapter, the Design consideration, this section gives an overview of some of the constrains and assumption that has been taken to consideration in the design.

The third to fifth chapter, contain discussions of the designs for the project with diagrams.

The sixth chapter, the Software interface design, contain the UI design samples from the system.

The seventh chapter, the Class diagram, this section contains the class diagram

# Design consideration

## Constrains

The system is designed to be built using python with already made TensorFlow API object recognition model and selenium for web-scrapping are used to generate the report

## System environment

The System is designed to work on Microsoft windows operating system

## Design methodology

The system is designed with flexibility for further development and/or modification. The system is divided into manageable processes that are grouped to sub-modules and modules that are built with abstraction.

# archtecture

## System design

A close up of a mans face

Description generated with high confidenceMain and subroutine call and return architecture style.

# data design

## Context diagram

## Dataflow diagram

### Level 0 diagram

### Level 1 diagram

# component design

## Scrapping by text

A picture containing text

Description generated with high confidence

## A close up of a map Description generated with very high confidence

## Scrapping by image

A close up of a sign

Description generated with high confidence

A close up of a map

Description generated with very high confidence

# software interface

## Object and actions

## User interface

## Screen image

# class diagram

A screenshot of a cell phone

Description generated with very high confidence

# Glossary