TABulator

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Chapter 1

Installation Guide

**1.1 System Requirements**

Platform : Ubuntu 14.04 or higher.

Python

**1.2 Set up Configuration and Setup**

1.2.1 Installation Steps

For installing TABulator, the user needs to take the following steps :

1. Enter the directory Team 7

2. Open terminal and run command sh installer.sh

At the end of these steps, the software gets installed on the user’s machine and a desktop launcher gets created. The application can be launched by double-clicking on the launcher.

1.2.2 Packages installed alongside

Following packages are installed during the installation process of TABulator.

* Imagemagick
* Ghostscript
* Tesseract 3.1
* Python 2.7
* OpenCV 3.1.0

1.2.3 Uninstalling TABulator

For uninstalling TABulator, run the command sh uninstall.sh from the directory Team 7/tabulator.

**1.3 Troubleshooting**

1.3.1 Dependencies not installed

In case one of the dependencies required for TABulator does not get installed, you may ﬁnd them listed in the previous chapter and try installing them manually.

1.3.2 Version conﬂict of dependencies

Uninstall the existing version of the conﬂicting dependency and then install the latest version.

1.3.3 Software does not run from desktop application

The recommended way to run TABulator is from the desktop application that gets created during the installation. However, if this application does not run, you may enter the directory Team 7/TABulator and execute the command python harry.py.

Chapter 2

User Manual

**2.1 Home Screen of TABulator**

**2.2 Essential Features**

**2.3 Additional Features**

Chapter 3

Description of Algorithms Used

Chapter 4

Listing of Modules of the code and an Architectural Diagram

**4.1 Use Case Diagram**

**4.2 Class Diagram**

**4.3 Data Flow Diagram**

**4.4 Activity Diagram**

Chapter 5

Test Plan

**5.1 Introduction**

5.1.1 Description

This document sketches out the test plan for the TABulator. The test plan used the black box approach and white box approach to uncover various bugs in the software. It was necessary then to perform regression testing to ensure that no new bugs have been introduced due to the introduction of correction patches in the code.

This paradigm will include, but is not limited to, the testing criteria, methods, and test cases of the overall design. Throughout the testing process the test documentation speciﬁcations described in the IEEE Standard 8291998 for Software Test Documentation will be applied.

5.1.2 Hardware Requirements for testing

The software is assumed to be tested on a machine with following conﬁguration :

* RAM: 4GB
* Processor: 64 bit

5.1.3 Software Requirements for testing

Operating System: Ubuntu 14.04 or higher.

**5.2 Test Items**

This section consists of the lists of the things that are to be tested within the scope of the test plan.

5.2.1 Features to be tested

Following conﬁguration :

* Plotting 2D/3D graphs from mathematical expression or ﬁles.
* The diﬀerent features like graph colour, graph edit, line width, expression tool, scatter plot etc. were tested.
  + 1. Features not to be tested
* The external library OpenCV 3.1.0 need not be tested as it is a stable standard external library for Image Processing and can be assumed to be bug free.
* Python, Imagemagick, Ghostscript, Tessaract.

**5.3 White Box Testing**

5.3.1 TABulator

The top module which controls all other UI elements:

* The last session save feature was tested.
* Restoring from the last session based on user choice was tested successfully.
* Application closing was tested.

5.3.2 MenuBar

**5.4 Black Box Testing**