TFUI Technical Installation Guide

Introduction

The entire Tensorflow user interface system is a web-application which will mostly run on your machine with internet connection. We have a [github](#) repository which contains the ultimate version of the project. This latest version, also called Master Branch of the repository, will need to be cloned in order to get the latest available version.

The system is now deployed and also available for access and beta-testing on the web.

The tools Git and npm are required to successfully install this system.

Prerequisites

The system requires *npm* and its respective dependencies in order to run, here's a list of the npm version needed and all the dependencies:

```
Npm v7.20.5 or better
"@angular/animations": "^12.0.5",
"@angular/cdk": "^12.2.1",
"@angular/common": "^12.0.5",
"@angular/compiler": "^12.0.5",
"@angular/core": "^12.0.5",
"@angular/elements": "^12.2.1",
"@angular/fire": "^7.0.4",
"@angular/forms": "^12.0.5",
"@angular/material": "^12.2.1",
"@angular/platform-browser": "^12.0.5",
"@angular/platform-browser-dynamic": "^12.0.5",
"@angular/router": "^12.0.5",
"@angular/service-worker": "^12.0.5",
"@fortawesome/angular-fontawesome": "^0.9.0",
"@ng-bootstrap/ng-bootstrap": "^10.0.0",
"@ngxs/devtools-plugin": "^3.7.2",
"@ngxs/logger-plugin": "^3.7.2",
"@ngxs/storage-plugin": "^3.7.2",
"@ngxs/store": "^3.7.2",
"@syncfusion/ej2-angular-diagrams": "^19.2.56",
"@types/file-saver": "^2.0.3",
"d3": "^7.0.1",
"d3-lasso": "0.0.5",
"document-register-element": "^1.7.2",
"file-saver": "^2.0.5",
"firebase": "^9.0.0",
```

```
"fs": "0.0.1-security",
"interactjs": "^1.10.11",
"leader-line-new": "^1.1.9",
"litegraph.js": "^0.7.10",
"rxjs": "~6.6.0",
"tslib": "^2.3.1",
"zone.js": "~0.11.4",
"rxfire": "^6.0.0"
```

You can download npm from this link:
https://nodejs.org/en/download/

You can download Git from this link:
https://git-scm.com/downloads

Installation

The system is a web-application which can be accessed using the link below:
https://tensorflow-ui.web.app/

In case the above link fails or you wish to use the application as a developer, follow
the steps below.

Open your command prompt by clicking on your windows search bar and typing
'cmd'.
Now navigate to the folder where you want to install the system. This can be done
with the 'cd' command:

1. >cd C:\Users\Intel\Documents\Computer Science

Start by cloning the repository with:

2. >gh repo clone COS301-SE-2021/TensorFlow-UI
If this doesn't work, try this command instead:
>git clone https://github.com/COS301-SE-2021/TensorFlow-UI
Once you successfully clone the repository, the entire system will be under a folder
called 'TensorFlow-UI'

Navigate to the TensorFlow-UI folder, and into the Frontend folder.

3. cd C:\Users\Intel\Documents\Computer Science\TensorFlow-UI\Frontend

Run the command 'npm install' to automatically download all the dependencies
required:

4. >npm install

Or download the packages manually with:
>*npm install DepencencyName*
where 'DependencyName' is the dependency you want to install.

Running

In order to run the program, run 'npm install' if you haven't done so already. Refer to Step 4 in the Installation section.

Next, you can build the application with:
>*npm run ng build*
Or run it directly with this command, which builds automatically:
>*npm run ng serve*

The server will be available on http://localhost:4200/

Using our Project

Please refer to our User Manual for a detailed description of the system and how to use it.

Link:
https://github.com/COS301-SE-2021/TensorFlow-UI/blob/master/Documentation/Tensorflow-UI_User-manual.pdf