User Guide

Team Code Blue

October 21, 2022

Contents

1 Introduction

Welcome to this document, which will contain information for the installation, use, and becoming familiar with the software Project Code Blue we have released.

2 Pre-requisites

To run this software, you must run it on a device with Windows 10 version 21H2 (October 11th release) or greater, the device must have a dedicated Graphics Processing Unit (GPU) of the Nvidia Family, with a designation greater then the 10 series (At time of writing, 10xx, 16xx 20xx 30xx 40xx cards suffice.) additionally time for processing of the impressed models and utilization of GPU will depend on each model of GPU you install on your device, as will the proper drivers downloaded from Nvidia be required. Google chrome, and the ability to install an extension is required to run this service.

3 Installation

Download the package from the website. After obtaining please unzip the files, then navigate to the newly created folder. Please run the included .exe to deploy the server component of the service. After you have run and reach this screen the desktop application should begin. You should be greeted with a view similar to the one depicted in figure 1. However, the 'state' of the pause/play button (Item A) should be in the pause state. Now close the desktop application. Before you begin generating recommendations please run the included html link in the folder, directing you to our extension deployed on the google store here: [PUBLISHED LINK HERE] (Currently Private).

4 Basic Use

In the most basic use, the service will automatically detect and download basic text information from web-pages you browse, 5 minutes after the local application receives your first web-page, it will begin impressing your web-pages into the local machine learning model. After adequate time to run the model a cached recommendation service will complete, with another set of cached recommendations taking place either on demand from the web extension by clicking the refresh icon highlighted by item B in figure 2 or after a short period of time when new data arrives at the local application. Shortly after a request for recommendations is done, and the model has processed your recommendations, you will receive in the browsers window your requested recommendation, ranked from most favorable to least.

After browsing recommendations, it is highly encouraged you engage with feedback through the chrome extension by clicking the appropriate thumbs up / thumbs down icon located next to the generated recommendations (See Item C of figure 2) in the case your experience with the recommended site was positive / negative.

In the case you launch the desktop application without the chrome extension active, or the chrome extension has not seen new web-pages yet, the desktop application will not generate any new impressions and will sit idly, waiting for recommendation requests. If you wish to then update the desktop application with new websites you have visited since it has been opened, simply restart the desktop application.

5 Advanced Features

5.1 Desktop Application

The desktop application also comes with metrics and features. To view the current process of impressions and content recommendation, please refer to Item C in figure 1. To view real-time metrics of GPU usage by the desktop application's process refer to Item D in figure 1. In the case you would like to start/stop the desktop application, please refer to the button highlighted by Item A in figure 1. Furthermore, features related to limiting GPU usage can be seen by opening the settings menu located on Item B in figure 1.

5.2 Chrome Extension

In the extension you may turn on/off data collection by enabling/disabling the button highlighted by Item A in figure 2. Our current extension looks like figure 3, we will continue to update our Extension to add more features given in figure 2 along with additional features and polish it further to make it more user-friendly. For now our output of recommendation is displayed in figure 4.

6 Uninstalling and Removal

6.1 Desktop Application

To uninstall the desktop application, simply remove the entire directory of the TCB application while it is not running.

6.2 Extension

To uninstall the chrome extension, go to manage extension and click on remove.

7 About Us & Contact Us

The source code for this project can be reached at https://github.com/teamcodeblue/projectblue For further comments about the software design

8 Graphics

8.1 Desktop Application Interface

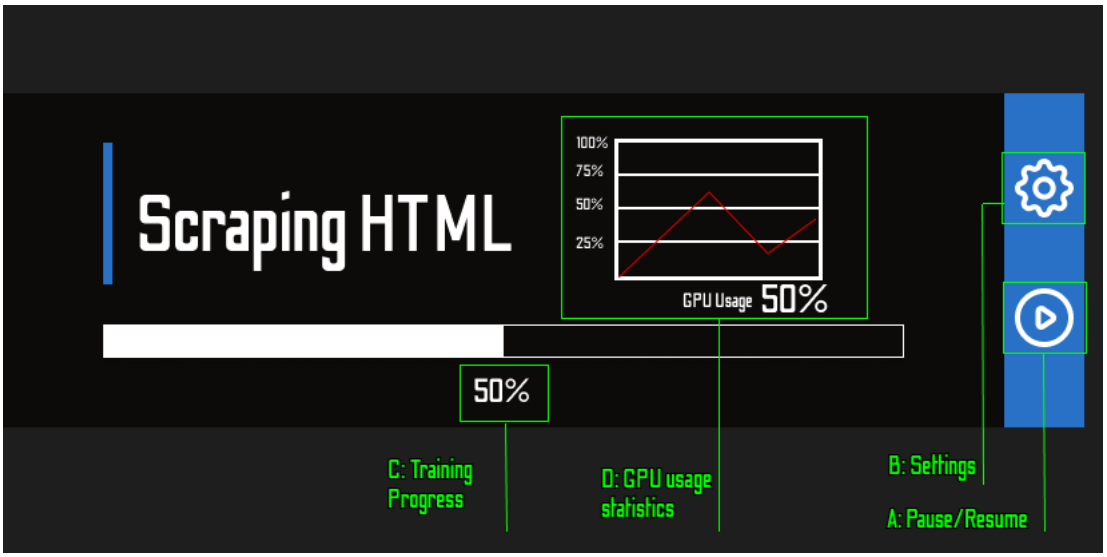

Figure 1: Desktop application user interface elements

8.2 Wire frame Extension Interface

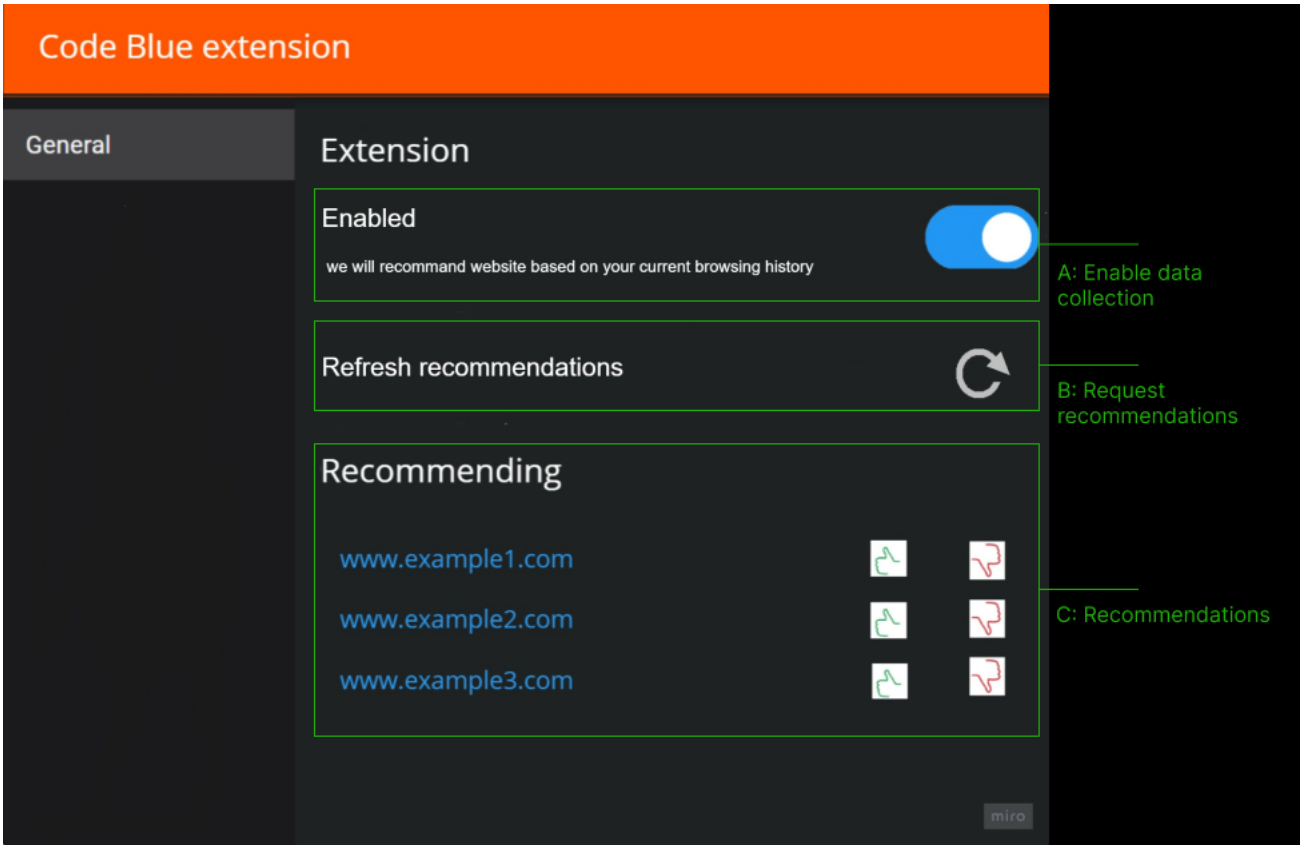

Figure 2: Chrome extension user interface elements

8.3 *Current Extension Interface*

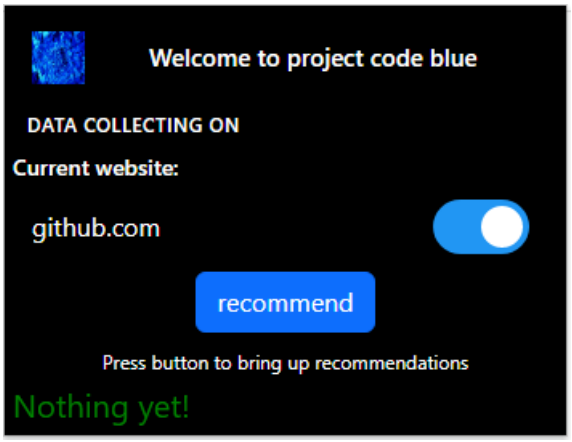

Figure 3: Current chrome extension user interface

8.4 *Current Extension Interface*

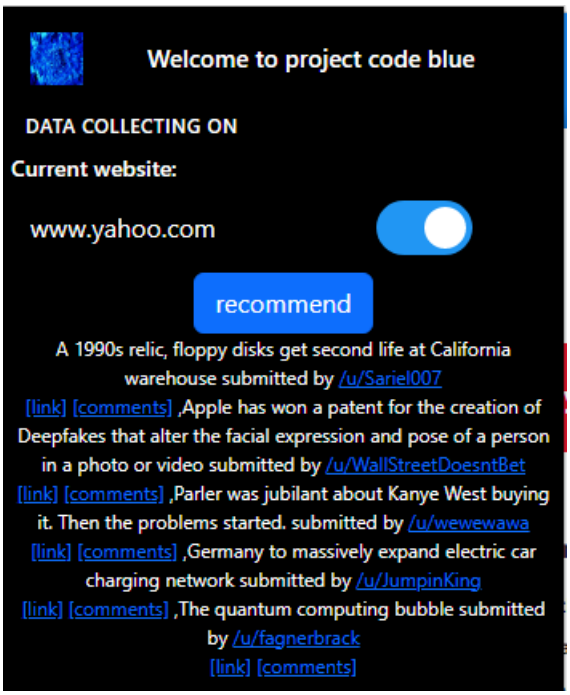

Figure 4: Current chrome extension user interface recommendation output