**Application Summary:**

The E.S.tension is a Google Chrome extension that can parse websites and extract email addresses from them. User can navigate to any website, and just one click the “Search” button on the extension popup to find all email addresses on the current website.

User also has the option to save the search results into database. If user provides a query word, the extension can rank all email addresses in the database according to their relevance to the query.

The Google Chrome web browser is needed to run this application.

**How-to guide:**

1. Installation: open terminal and direct to the directory where you want to download the extension. Use the following command to download from the GitHub repo (https://github.com/yuemingpang/CourseProject.git):



1. Unzipped the file and find the “app” folder. Open Google Chrome web browser, and direct to the extensions page. On the top right corner, enable developer mode. Use load unpacked button and select the “app” folder to unpack. Now you will find the extension installed as below:

Graphical user interface, application

Description automatically generated

1. Pin the extension to the browser so that you can easily access to it.

**Implementation details:**

The source code is available at our GitHub repo (<https://github.com/yuemingpang/CourseProject.git>).

**manifest.json**

It records important metadata, defines resources, declares permissions, and identifies which files to run in the background and on the page.

**content.js**

It directly interacts with a web page and executes JavaScript in the context of a web page. We use a regular expression to match with the format of email address. Every match will be added to the list and send to popup that will be showed to the user.

**background.js**

It uses Chrome APIs and stores email addresses on the background.

**popup.html, popup.css, and popup.js**

It controls the logics and appearance of the extension popup. HTML controls the layout of the popup window. CSS gives the popup window its style and colors. JavaScript file defines the onclick of the buttons and send request to content.js for matching the emails.

**Icon**:

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**Developers and contributions:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Tasks** | **Lead developer** |  | **Assisting developers** |
| Build the skeleton of the chrome extension | Yueming Pang |  | Schillaci Mcinnis, Yuling Gao |
| Implementation of web crawler and indexer | Yuling Gao |  | Schillaci Mcinnis, Yueming Pang |
| Implementation of the ranking function | Schillaci Mcinnis |  | Yuling Gao, Yueming Pang |
| Software verification, debugging, and documentation | Yueming Pang, Yuling Gao, Schillaci Mcinnis | | |
| Software usage tutorial presentation | Yueming Pang | | |
| Team coordination and other deliverables | Yueming Pang | | |