CSC 510 Software Engineering

Group 14

SHOPSYNC

Group Members:

Devyash Keyurbhai Shah
Smit Sunilkumar Raval
Vatsalkumar Dharmendrabhai Patel

Introduction

- Are you constantly searching for the best online deals? ShopSync is your ultimate companion, automating price comparison across major platforms like Amazon, Walmart, Target, BestBuy, Costco, and eBay. This publicly accessible web API framework eliminates the hassle of manual browsing, saving users more than 50% of their time.
- Built on a modern and flexible technology stack, ShopSync offers developers an exciting opportunity to explore cutting-edge tools such as web scraping with python, API integration in Flask, and Chrome extension development.

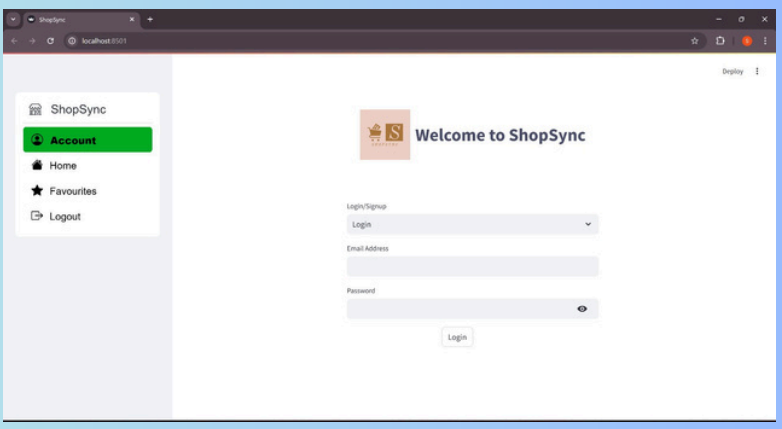
Improvements done by us in Version 5:

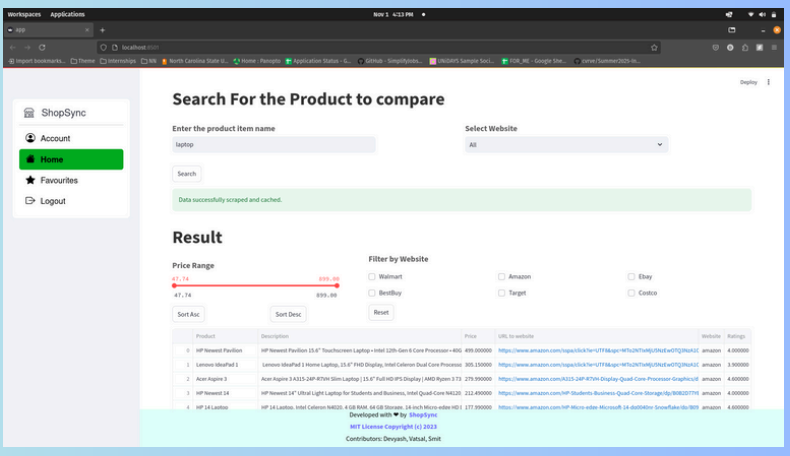
- User Authentication:
  - We implemented a robust authentication system that allows users to register, log in, and log out seamlessly using Firestore as the backend database. This enhancement ensures secure user access and a personalized experience for each account.
- Favorites Feature:
  - A dedicated favorites page was added, enabling users to store and manage their preferred items. This feature leverages Firestore to persist user favorites, making it easy for users to quickly access their most desired products across all platforms.
- Sorting and Filtering Options:
  - We introduced comprehensive sorting and filtering capabilities, including ascending and descending order options, as well as checkboxes for filtering by individual companies. Additionally, a reset button was added to allow users to quickly clear their selections and start fresh, enhancing usability.
- Enhanced Navigation with Sidebar:
  - To improve user experience, a sidebar navigation feature was implemented. This allows users to easily access different sections of the application without excessive scrolling or searching, making navigation more intuitive and efficient.
- User Interface Enhancements:
  - The overall user interface was significantly improved by focusing on enhanced navigation and a simpler design. We ensured consistent text sizes and introduced interactive checkboxes and filter buttons, which contribute to a more engaging and user-friendly experience.

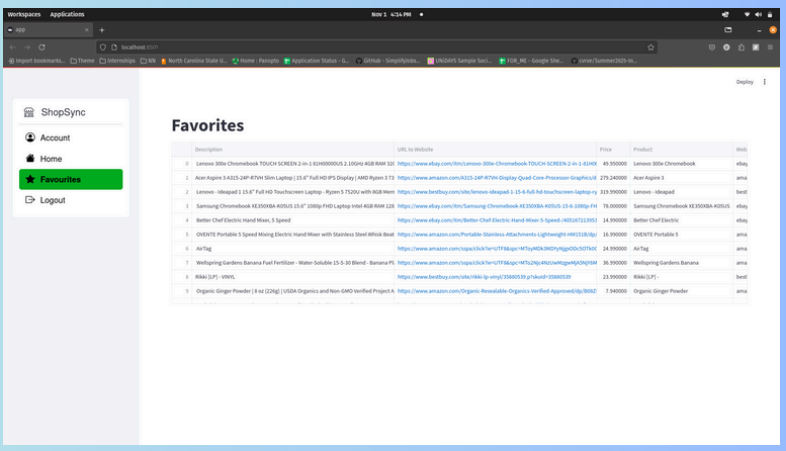
Future scope for Version 6 :

1. Search History: Implement a search history feature that allows users to easily revisit their previous searches for a more convenient shopping experience.
2. Cookies: Introduce cookies to enhance user experience by remembering user preferences and maintaining session information across visits.
3. Images for Items: Add images for each item listed in the search results to provide users with a visual reference and improve product engagement.
4. Remove from Favorites: Develop a functionality that allows users to easily remove items from their favorites list, ensuring that they can manage their preferences effortlessly.

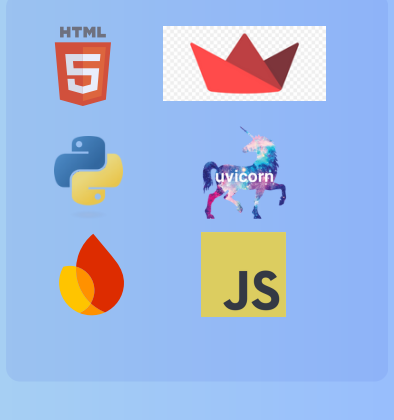
The project includes 60 test cases for the new functionalities added to ensure the functionality and reliability of critical components in the grievance management system.







GITHUB



2. https://github.com/devyash2930/ShopSync-SE/tree/testing

3.

Rubric	Self-Assessment SUM: 102	Evidence
Workload is spread over the whole team (one team member is often Xtimes more productive than the others…	3	https://github.com/devyash2930/ShopSync-SE/tree/testing
but nevertheless, here is a track record that everyone is contributing a lot)	3	https://github.com/devyash2930/ShopSync-SE/commits/testing/
Number of commits	3	https://github.com/devyash2930/ShopSync-SE/pulse
Number of commits: by different people	3	https://github.com/devyash2930/ShopSync-SE/pulse
Issues reports: there are **many**	2.5	https://github.com/devyash2930/ShopSync-SE/issues
Issues are being closed	2.5	https://github.com/CSC510-Team-57/To-Done/issues
Docs: doco generated, format not ugly	2.5	In GH
Docs: what: point descriptions of each class/function (in isolation)	2.5	In GH
Docs: how: for common use cases X,Y,Z mini-tutorials showing worked examples on how to do X,Y,Z	2.5	https://github.com/devyash2930/ShopSync-SE/blob/testing/README.md
Docs: why: docs tell a story, motivate the whole thing, deliver a punchline that makes you want to rush out and use the thing	2.5	https://github.com/devyash2930/ShopSync-SE/blob/testing/README.md
Docs: short video, animated, hosted on your repo. That	3	TODO

convinces people why they want to work on your code.		
Use of version control tools	3	We used Git
Test cases exist	3	https://github.com/devyash2930/ShopSync-SE/tree/testing/new_tests
Test cases are routinely executed	3	https://github.com/devyash2930/ShopSync-SE/blob/testing/.github/workflows/unit_test.yml
Issues are discussed before they are closed	3	https://github.com/devyash2930/ShopSync-SE/discussions
Chat channel: exists	3	https://github.com/devyash2930/ShopSync-SE/discussions
Test cases: a large proportion of the issues related to handling failing cases.	3	The issues were mostly related to the new development features we wanted to add. Additional issues were then created based on issues we discovered with either black box or white box testing
Evidence that the whole team is using the same tools: everyone can get to all tools and files	3	In GH
Evidence that the whole team is using the same tools (e.g. config files in the repo, updated by lots of different people)	3	In GH
Evidence that the whole team is using the same tools (e.g. tutor can ask anyone to share screen, they demonstrate the system running on their computer)	3	In GH
Evidence that the members of the team are working	3	In GH

across multiple places in the code base		
Short release cycles	3	https://github.com/devyash2930/ShopSync-SE/commits/testing/
The file .gitignore lists what files should not be saved to the repo. See [examples]i(https://github.com/github/gitignore)	3	https://github.com/devyash2930/ShopSync-SE/blob/testing/.gitignore
The file INSTALL.md lists how to install the code	3	https://github.com/devyash2930/ShopSync-SE/blob/testing/INSTALL.md
The file LICENSE.md lists rules of usage for this repo	3	https://github.com/devyash2930/ShopSync-SE/blob/testing/LICENSE
The file CODE-OF-CONDUCT.md lists rules of behavior for this repo; e.g. see example	3	https://github.com/devyash2930/ShopSync-SE/blob/testing/Code_Of_Conduct.md
The file CONTRIBUTING.md lists coding standards and lots of tips on how to extend the system without screwing things up; e.g. see example	3	https://github.com/devyash2930/ShopSync-SE/blob/testing/CONTRIBUTING.md
The file README.md contains all the following	3	https://github.com/devyash2930/ShopSync-SE/blob/testing/README.md
Video	3	https://github.com/devyash2930/ShopSync-SE/blob/testing/media/Demo.mp4
DOI badge: exists. To get a Digitial Object Indentifier, regiser the project at Zenodo. DOI badges look like this:	3	https://zenodo.org/records/14020468
Badges showing your style checkers	3	https://github.com/devyash2930/ShopSync-SE/blob/testing/.github/workflows/style_checker.yml

Badges showing your code formatters.	3	https://github.com/devyash2930/ShopSync-SE/blob/testing/.github/workflows/code_formatter.yml
Badges showing your syntax checkers.	3	https://github.com/devyash2930/ShopSync-SE/blob/testing/.github/workflows/main.yml
Badges showing your code coverage tools	3	https://github.com/devyash2930/ShopSync-SE/blob/testing/.github/workflows/code_cov.yml
Badges showing any other Other automated analysis tools	3	In the README
Question 1.1: Does your website and documentation provide a clear, high-level overview of your software?	Yes	
Question 1.2: Does your website and documentation clearly describe the type of user who should use your software?	Yes	
Question 1.3: Do you publish case studies to show how your software has been used by yourself and others?	No	
Question 2.1: Is the name of your project/software unique?	Yes	
Question 2.2: Is your project/software name free from trademark violations?	Yes	We believe so
Question 3.1: Is your software available as a package that can be	Yes	There is no need to build

deployed without building it?		
Question 3.2: Is your software available for free?	Yes	
Question 3.3: Is your source code publicly available to download, either as a downloadable bundle or via access to a source code repository?	Yes	
Question 3.4: Is your software hosted in an established, third-party repository likeGitHub (https://github.com), BitBucket (https://bitbucket.org),LaunchPad (https://launchpad.net) orSourceForge (https://sourceforge.net)?	Yes	We use GitHub
Question 4.1: Is your documentation clearly available on your website or within your software?	Yes	
Question 4.2: Does your documentation include a "quick start" guide, that provides a short overview of how to use your software with some basic examples of use?	Yes	
Question 4.3: If you provide more extensive documentation, does this provide clear, step-by-step instructions on how to deploy and use your software?	N/A	
Question 4.4: Do you	Yes	

provide a comprehensive guide to all your software's commands, functions and options?		
Question 4.5: Do you provide troubleshooting information that describes the symptoms and step-by-step solutions for problems and error messages?	No	
Question 4.6: If your software can be used as a library, package or service by other software, do you provide comprehensive API documentation?	N/A	
Question 4.7: Do you store your documentation under revision control with your source code?	Yes	
Question 4.8: Do you publish your release history e.g. release data, version numbers, key features of each release etc. on your web site or in your documentation?	Yes	
Question 5.1: Does your software describe how a user can get help with using your software?	Yes	We provide links to contact us, or users can ask in discussions
Question 5.2: Does your website and documentation describe what support, if any, you provide to users and developers?	Yes	We provide an area to report bugs and ask for new features, in issues on github
Question 5.3: Does your project have an e-mail address or forum that is	No	

solely for supporting users?		
Question 5.4: Are e-mails to your support e-mail address received by more than one person?	No	
Question 5.5: Does your project have a ticketing system to manage bug reports and feature requests?	Yes	We have an issues page
Question 5.6: Is your project's ticketing system publicly visible to your users, so they can view bug reports and feature requests?	Yes	The issues page is publicly visible
Question 6.1: Is your software's architecture and design modular?	Yes	
Question 6.2: Does your software use an accepted coding standard or convention?	Yes	
Question 7.1: Does your software allow data to be imported and exported using open data formats?	No	
Question 7.2: Does your software allow communications using open communications protocols?	Yes	
Question 8.1: Is your software cross-platform compatible?	Yes	
Question 9.1: Does your	Yes	

software adhere to appropriate accessibility conventions or standards?		
Question 9.2: Does your documentation adhere to appropriate accessibility conventions or standards?	Yes	
Question 10.1: Is your source code stored in a repository under revision control?	Yes	Yes as we use GitHub
Question 10.2: Is each source code release a snapshot of the repository?	Yes	
Question 10.3: Are releases tagged in the repository?	Yes	
Question 10.4: Is there a branch of the repository that is always stable? (i.e. tests always pass, code always builds successfully)	Yes	testing Branch
Question 10.5: Do you back-up your repository?	No	
Question 11.1: Do you provide publicly-available instructions for building your software from the source code?	N/A	
Question 11.2: Can you build, or package, your software using an automated tool?	No	
Question 11.3: Do you	Yes	

provide publicly-available instructions for deploying your software?		
Question 11.4: Does your documentation list all third-party dependencies?	Yes	In the requirements
Question 11.5: Does your documentation list the version number for all third-party dependencies?	Yes	
Question 11.6: Does your software list the web address, and licences for all third-party dependencies and say whether the dependencies are mandatory or optional?	Yes	
Question 11.7: Can you download dependencies using a dependency management tool or package manager?	Yes	
Question 11.8: Do you have tests that can be run after your software has been built or deployed to show whether the build or deployment has been successful?	Yes	
Question 12.1: Do you have an automated test suite for your software?	Yes	
Question 12.2: Do you have a framework to periodically (e.g. nightly) run your tests on the latest version of the source code?	No	

Question 12.3: Do you use continuous integration, automatically running tests whenever changes are made to your source code?	Yes	
Question 12.4: Are your test results publicly visible?	Yes	
Question 12.5: Are all manually-run tests documented?	No	
Question 13.1: Does your project have resources (e.g. blog, Twitter, RSS feed, Facebook page, wiki, mailing list) that are regularly updated with information about your software?	No	
Question 13.2: Does your website state how many projects and users are associated with your project?	Yes	
Question 13.3: Do you provide success stories on your website?	No	
Question 13.4: Do you list your important partners and collaborators on your website?	No	
Question 13.5: Do you list your project's publications on your website or link to a resource where these are available?	No	
Question 13.6: Do you list third-party publications that refer to your software on	No	

your website or link to a resource where these are available?		
Question 13.7: Can users subscribe to notifications to changes to your source code repository?	No	
Question 13.8: If your software is developed as an open source project (and, not just a project developing open source software), do you have a governance model?	No	
Question 14.1: Do you accept contributions (e.g. bug fixes, enhancements, documentation updates, tutorials) from people who are not part of your project?	Yes	
Question 14.2: Do you have a contributions policy?	Yes	
Question 14.3: Is your contributions' policy publicly available?	Yes	
Question 14.4: Do contributors keep the copyright/IP of their contributions?	Yes	
Question 15.1: Does your website and documentation clearly state the copyright owners of your software and documentation?	Yes	

Question 15.2: Does each of your source code files include a copyright statement?	No	
Question 15.3: Does your website and documentation clearly state the license of your software?	Yes	
Question 15.4: Is your software released under an open source license?	Yes	
Question 15.5: Is your software released under an OSI-approved open-source license?	Yes	
Question 15.6: Does each of your source code files include a license header?	No	
Question 15.7: Do you have a recommended citation for your software?	Yes	
Question 16.1: Does your website or documentation include a project roadmap (a list of project and development milestones for the next 3, 6 and 12 months)?	Yes	
Question 16.2: Does your website or documentation describe how your project is funded, and the period over which funding is guaranteed?	No	
Question 16.3: Do you	No	

make timely announcements of the deprecation of components, APIs, etc.?		