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UE21CS341A - Software Engineering
Test Plan Documentation

Chrome Extension - PLEXI
All-in-One Productivity Enhancer

Team : 05

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1. Introduction

1.1 Purpose
The purpose of this document is to outline the testing strategy and approach for the All-in-One Productivity Chrome Extension project.

1.2 Scope
This test plan covers the testing of all functional features and qualitative properties of the Chrome extension, including Bookmark Manager, Language Translator, Quick Notes and To-Do Lists, Adaptive Dark Mode, Webpage Annotations, Password Generator and Manager, Quick Search AI, and Quick Screenshot tool.

1.3 Objectives
Ensure all functionalities work as expected.
Validate that the extension enhances users' browsing experiences.
Verify the extension's compatibility across various platforms.

1.4 Responsibilities
Development Team: Responsible for implementing the functionalities.
Testing Team: Responsible for executing and documenting test cases.

2. Test Cases

2.1 Bookmark Manager

Test Case ID	Name of Module	Test Case Description	Pre-conditions	Test Steps	Test Data	Expected Results	Actual Results	Test Result
UT_01	Bookmark Manager	Creating a bookmark	Extension installed, open webpage	1. Click on the bookmark icon. 2. Fill in name and category. 3. Save.	Name: "Example", Category: "Research"	Bookmark is created and visible in the "Research" category.		
IT_01	Bookmark Manager	Importing bookmarks	Extension installed, bookmarks exported	1. Click on the import button. 2. Select the exported file. 3. Confirm import.	Exported bookmarks file	Bookmarks from the file are imported successfully.		
ST_01	Bookmark Manager	Exporting bookmarks	Extension installed, bookmarks created	1. Click on the export button. 2. Save the file.		Bookmarks are saved in the exported file.		

❖ **Bookmark Manager**

Test Case UT_01: Creating a bookmark

Test Case Description: This test case verifies the functionality of creating a bookmark.

Pre-conditions: The extension is installed and a webpage is open.

Test Steps:

- Click on the bookmark icon.
- Enter a name and select a category.
- Save the bookmark.

Test Data: Name: "Example", Category: "Research"

Expected Results: The bookmark is created and visible in the "Research" category.

2.2 Language Translator

Test Case ID	Name of Module	Test Case Description	Pre-conditions	Test Steps	Test Data	Expected Results	Actual Results	Test Result
UT_02	Language Translator	Translating selected text	Extension installed, open webpage with text	1. Select text. 2. Click on the translate icon.	Selected text: "Bonjour", Target Language: English	Text is translated to English		
IT_02	Language Translator	Translating entire webpage	Extension installed, open webpage	1. Click on the translate icon.	Target Language: Spanish	Entire webpage is translated to Spanish.		
ST_02	Language Translator	Changing translation language	Extension installed, open webpage	1. Change target language. 2. Click on the translate icon.	Target Language: German	Entire webpage is translated to German.		

❖ **Language Translator**

Test Case UT_02: Translating selected text

Test Case Description: This test case verifies the functionality of translating selected text.

Pre-conditions: The extension is installed and a webpage with text is open.

Test Steps:

- Select a portion of text.
- Click on the translate icon.

Test Data: Selected text: "Bonjour", Target Language: English

Expected Results: The selected text is translated to English.

2.3 Quick Notes and To-Do Lists

Test Case ID	Name of Module	Test Case Description	Pre-conditions	Test Steps	Test Data	Expected Results	Actual Results	Test Result
UT_03	Quick Notes and To-Do Lists	Creating a note.	Extension installed.	1. Click on the notes icon. 2. Write a note. 3. Save.	Note: "Meeting at 3 PM"	Note is saved and visible in the list.		
IT_03	Quick Notes and To-Do Lists	Editing a task.	Extension installed, task created.	1. Click on the task. 2. Edit details. 3. Save.	Task: "Buy groceries"	Task details are updated.		
ST_03	Quick Notes and To-Do Lists	Deleting a note.	Extension installed, note created.	1. Click on the delete icon. 2. Confirm deletion		Note is deleted and not visible in the list.		

❖ **Quick Notes and To-Do Lists**

Test Case UT_03: Creating a note

Test Case Description: This test case verifies the functionality of creating a note.

Pre-conditions: The extension is installed.

Test Steps:

- Click on the notes icon.
- Write a note.
- Save the note.

Test Data: Note: "Meeting at 3 PM"

Expected Results: The note is saved and visible in the list.

2.4 Adaptive Dark Mode

Test Case ID	Name of Module	Test Case Description	Pre-conditions	Test Steps	Test Data	Expected Results	Actual Results	Test Result
UT_04	Adaptive Dark Mode	Enabling dark mode	Extension installed, open webpage without native dark mode support.	1. Click on the dark mode icon.		Dark mode is enabled for the webpage.		
IT_04	Adaptive Dark Mode	Disabling dark mode	Extension installed, open webpage with dark mode enabled .	1. Click on the dark mode icon.		Dark mode is disabled for the webpage.		
ST_04	Adaptive Dark Mode	Configuring dark mode settings	Extension installed.	1. Open extension settings. 2. Adjust dark mode settings. 3. Save.	Dark mode settings: Contrast: High, Opacity: 70%	Dark mode is customized as per settings.		

❖ **Adaptive Dark Mode**

Test Case UT_04: Enabling dark mode

Test Case Description: This test case verifies the functionality of enabling dark mode.

Pre-conditions: The extension is installed and a webpage without native dark mode support is open.

Test Steps:

● Click on the dark mode icon.

Test Data: N/A

Expected Results: Dark mode is enabled for the webpage.

2.5 Webpage Annotations

Test Case ID	Name of Module	Test Case Description	Pre-conditions	Test Steps	Test Data	Expected Results	Actual Results	Test Result
UT_05	Webpage Annotations.	Highlighting content.	Extension installed, open webpage	1. Select content. 2. Click on the highlight icon.	Selected content	Content is highlighted.		
IT_05	Webpage Annotations.	Adding a note.	Extension installed, open webpage	1. Click on the note icon. 2. Write a note. 3. Save.	Note: "Important point"	Note is saved and associated with the webpage.		
ST_05	Webpage Annotations.	Exporting annotations.	Extension installed, annotations created	1. Click on the export icon. 2. Save the file.		Annotations are saved in the exported file.		

❖ **Webpage Annotations**

Test Case UT_05: Highlighting content

Test Case Description: This test case verifies the functionality of highlighting content on a webpage.

Pre-conditions: The extension is installed and a webpage is open.

Test Steps:
- Select content on the webpage.
- Click on the highlight icon.

Test Data: Selected content

Expected Results: The selected content on the webpage is highlighted.

2.6 Password Generator and Manager

Test Case ID	Name of Module	Test Case Description	Pre-conditions	Test Steps	Test Data	Expected Results	Actual Results	Test Result
UT_06	Password Generator and Manager	Generating a password	Extension installed	1. Click on the password icon. 2. Configure options. 3. Generate.	Length: 12, Include Symbols: Yes	Password is generated as per the specified options.		
IT_06	Password Generator and Manager	Saving a password	Extension installed, generated password	1. Click on the save icon. 2. Provide a name and category. 3. Save.	Name: "Email Password", Category: "Work"	Password is saved and visible in the "Work" category.		
ST_06	Password Generator and Manager	Copying a password	Extension installed, password saved	1. Click on the copy icon next to the password.		Password is copied to the clipboard.		

❖ **Password Generator and Manager**

Test Case UT_06: Generating a password

Test Case Description: This test case verifies the functionality of generating a password.

Pre-conditions: The extension is installed.

Test Steps:

- Click on the password icon.
- Configure options for the password.
- Generate the password.

Test Data: Length: 12, Include Symbols: Yes

Expected Results: A password is generated according to the specified options.

2.7 Quick Search AI

Test Case ID	Name of Module	Test Case Description	Pre-conditions	Test Steps	Test Data	Expected Results	Actual Results	Test Result
UT_07	Quick Search AI	Conducting a quick web search	Extension installed	1. Enter a search query in the search bar. 2. Press Enter.	Search Query: "Productivity tips"	Relevant search results are displayed in the extension.		
IT_07	Quick Search AI	Refining search results	Extension installed, search results displayed	1. Apply filters or refine search query.	Filters: Time: Past Month, Source: Blogs	Search results are updated based on applied filters.		
ST_07	Quick Search AI	Opening search results	Extension installed, search results displayed	1. Click on a search result.		Selected search result is opened in a new tab.		

❖ **Quick Search AI**

Test Case UT_07: Conducting a quick web search

Test Case Description: This test case verifies the functionality of conducting a quick web search using AI.

Pre-conditions: The extension is installed.

Test Steps:

- Enter a search query in the search bar.
- Press Enter.

Test Data: Search Query: "Productivity tips"

Expected Results: Relevant search results are displayed in the extension.

2.8 Quick Screenshot

Test Case ID	Name of Module	Test Case Description	Pre-conditions	Test Steps	Test Data	Expected Results	Actual Results	Test Result
UT_08	Quick Screenshot	Capturing a screenshot	Extension installed, open webpage.	1. Click on the screenshot icon. 2. Select area to capture.	Selected Area	Screenshot is captured and displayed in the extension.		
IT_08	Quick Screenshot	Annotating a screenshot	Extension installed, screenshot captured.	1. Click on the edit icon. 2. Add annotations. 3. Save.	Annotations: "Note on screenshot"	Annotations are added to the screenshot.		
ST_08	Quick Screenshot	Managing screenshots	Extension installed, multiple screenshots captured.	1. Click on the screenshot icon. 2. View the screenshot history.		List of captured screenshots is displayed.		

❖ **Quick Screenshot**

Test Case UT_08: Capturing a screenshot

Test Case Description: This test case verifies the functionality of capturing a screenshot of a webpage.

Pre-conditions: The extension is installed and a webpage is open.

Test Steps:

- Click on the screenshot icon.
- Select an area to capture.

Test Data: Selected Area

Expected Results: A screenshot is captured and displayed in the extension.

3. Conclusion

The above test cases cover the functional features of the All-in-One Productivity Chrome Extension, including Bookmark Manager, Language Translator, Quick Notes and To-Do Lists, Adaptive Dark Mode, Webpage Annotations, Password Generator and Manager, Quick Search AI, and Quick Screenshot tool. Each test case is categorized into Unit, Integration, and System testing to ensure comprehensive coverage.