# Master Test Plan: Daily Bible Verse New Tab Chrome Extension

**Bryce Furrow** 

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# 1. INTRODUCTION

# 1.1. Project Overview

This document outlines the testing strategy and approach for the development of a Google Chrome extension that creates highly customizable new tabs to display Bible verses. While a number of extensions exist that display verses on new tabs, many are extremely bland and static, lacking any customization options. This extension will create a more effective, convenient, and personalized way to deliver the Word to any user.

# 1.2. Goals/Objectives

- Validate the functionality and customization options of the Bible verses and the New Tab for the extension
- Ensure extension compatibility within the Chrome browser framework
- Ensure that the extension and its customization is satisfying and easy-to-use, receiving feedback from a variety of users
- Measure and minimize load for best performance stability even with a large number of new tabs

# 1.3. Constraints

- There is a limited time to work before milestones and due dates, including the final submission.
- This is a one-man project I am the only developer and test manager.
- I have multiple ongoing courses with weekly projects of their own, requiring split attention with this project.
- Due to critical issues regarding my usual workspace, I am working within a limited environment on another laptop. This will negatively affect the development and testing time. This is also subject to change, for better and for worse.

# 2. REFERENCES

# 2.1. Project Proposal

• <u>GitHub – Project Proposal</u>

# 2.2. Project Requirements

• GitHub – Project Requirements

# 3. TESTING STRATEGY

# 3.1. Test Items

- Daily Bible Verses v1.0
  - o (release name pending)
- Google Chrome v117.0.5938.132 (latest version)
- User questionnaire (UAT)

# 3.2. Test Features

- Requirements Document
  - (The number next to each feature relates to the corresponding ID Number in the Requirements Document.)
  - (Features not necessary and/or out-of-scope features that I would ideally like to pursue, if possible, have "\*"s and are colored red) (25)

# Settings

- Basic menu stores all settings featured below
  - (\*at least for development/testing, may not be in final release depending on the point below\*)
- O User-intuitive ways to change settings (17, 20)
- O Default settings for all not a blank slate, but a serviceable basis (14)
- \*Ability to reset to default settings\*
  - (\*Total reset and of specific settings\*)
- o Preset options (14)
  - (Basic options)
  - (\*Planned wholistic "book-esque" preset\*)
- User custom choice for options (most)
- \*Save and store specific number of user presets\*
- \*Undo last change\*
  - (\*single change OR more stored???\*)
- Theme Selection
  - o Basic light and dark modes (9, 18)
    - Default to user system setting
    - (\*Extra light/dark variations\*)
  - Optional color schemes
    - (tbd any specific schemes or quantity of schemes)
  - Custom color schemes
    - (tbd any specific schemes or quantity of schemes)
- Background image (3)
  - o Default image(s) (15)
  - User custom uploads (3)
    - (\*include audio/video like gifs and mp4s\*?\*)

- \*Additional options\*
  - \*Opacity
  - Brightness
  - Contrast
  - Etc.
  - (Audio or no audio if mp4)\*
- Bible verse window (1)
  - o \*Window background\*
    - Default none
      - (\*included images\*)
    - User custom uploads
      - (\*include audio/video like gifs and mp4s\*?\*)
  - \*Window border\*
    - (\*thickness
    - opacity
    - color
    - shadow\*)
  - Window opacity
  - Window color
    - (Basic options and color wheel)
  - Window size and dimensions
  - Window positioning (4)
    - Default is center-screen
    - Presets for various quadrants (4)
    - User custom choice, most likely via drag-and-drop (4)
    - (\*Cannot overlap with search bar intuitive, but not in scope\*)
  - Text display options
    - Size
    - Font
      - (Default fonts tbd)
      - (Allow user custom uploads)
    - Color
      - (Basic options and color wheel)
    - Alignment
      - (Presets for quadrants, including center as default)
      - (\*User option to move text within window via drag-and-drop\*)
- Bible Gateway connection (22)
  - Verse via random selection (7)
  - Verse via user choice (8)
  - Verse of the Day (default) (6)
  - o Bible version options (5)
  - o Bible language options (19)

- Search bar implementation (2)
  - o Sync with default browser (2)
  - o (\*Optional page feature can choose to remove\*)
- Additional Bible Gateway features
  - o Sign up/login to Bible Gateway account to unlock additional feature(s)
    - (\*Access favorite verses\*)
    - (\*Display highlights\*)
    - (\*Have a notes widget on the side\*)
    - Post Bible verses on social media (10)
- \*Additional widgets\*
  - o (\*customizable clock, weather, news feed, etc.\*)
- Tutorials (12)
  - o Guide first-time users and users seeking help through the settings (12)
    - (Ensure that the tone is representative of Christ)
    - Ensure clear instructions for those less experienced with technology (12)
    - (\*Allow for an easy skip option\*)
    - (Make sure that users are not pressured by all the options make it clear that there are easy presets and wider choice beyond that is up to them)
- Errors
  - o Avoid errors, obviously (16, 22)
  - o Display errors to users informative, but not too informative
  - o (\*Go to last stable state if error encountered\*)

# 3.3. Test Approach

- My overall approach to testing will be primarily manual testing. The presets, user settings, and the Bible Gateway sync will be easy to test. The many other customization features will be testing extremes, many of which will often be implemented on purpose and allowed for the sake of user customization.
   (Regardless of aesthetic appeal or "normal" sensibility user choice is the priority.)
  - As the sole developer, all the extensive testing performed by myself will be white box testing.
  - As for anyone else tested, they will perform black box testing. This would approximate how users would receive it from the Chrome Web Store, testing whether the tutorial and all the concepts it introduces are effectively communicated and understood soon after.
    - (Further gray testing may be performed with these testers, but that is tbd.)
- (As of now, there is no intention to perform automated testing, but that may be subject to change.)

The types of tests that will be performed are unit tests, integration tests, system tests, and user acceptance tests (UATs).

### 3.3.1. System Test

- o This testing ensures that Bible Gateway is synced properly and that each customization setting within a new tab is properly implemented – default, other presets, and user-chosen – in an individual sense and all together.
- o It also verifies if the settings are maintained across many new tabs and tests whether settings save or not upon webpage refresh, extension on/off, browser on/off, post-shutdown, etc.
- o Is it displaying *each* and *all* of the features as expected?
  - Yes or no? -> Pass or fail ]
  - (refer to Test Plan Section 3.2 above)
  - (refer to Project Requirements, IDs 1-24)

### User Acceptance Test (UAT) 3.3.2.

- This testing verifies whether the primary purpose of the extension has been met or not – user satisfaction.
- Testing would be with a variety of users with different systems and different technical experience; therefore, it will be simultaneous testing with performance/load, compatibility, and usability as well.
- Testers would be given a test script, telling them the premise of having downloaded a Google Chrome extension that says it has Bible verses appear on new tabs, but that it's also very customizable.
  - (In part, they would be introduced with the premise that would theoretically exist on the Web Store description.)
- I would request that they comment on their thoughts and experiences throughout the test, which I would record for further insight as I watched what they did and how.
- o If they are having trouble, note that, and give them slight pushes towards important features.

Testers would be asked for their thoughts about various elements of the extension after given ample time.

- This would outline all the basic test features intended for this extension.
  - Includes in and out-of-menu settings (17, 20), the menus themselves, the appeal of various preset options (14, 15), the light and dark modes (9, 18), the background image (3), the Bible verse

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window and settings regarding it (1, 4, 22, 7, 8, 6, 5, 19, 10), and so on.

- (Additional test features would also be added accordingly.)
- It would also assess generalities regarding performance, usability, and overall aesthetics.
- The survey would request a number on a satisfaction scale from 1 to 5, with 5 as most pleasing, for each of these.
  - (The goal is to have a 4 on average.)
  - There would also be a blank on the side to put ones specific qualitative reasoning.
- o Their final overall experience will be graded on the same scale.
- There will be a section at the end for specific recommendations and changes to take into consideration.

# 4. TEST DELIVERABLES

# 4.1. Test Plan

• [LINK TO SELF]

# 4.2. Test Cases

• (much unknown until implementation)

Case	Feature	Action	Expected Result(s)	Actual Results(s)	Pass/Fail (Yes/No)
1	Open settings menu	(all tba until implemented)	Opens the settings menu	(all tba)	(all tba)
2	Default light/dark mode (9, 18)		Initialized according to system setting; changes according to user choice		
3	Preset color schemes		Appearance changes according to corresponding color scheme		
4	User custom color schemes		Appearance changes according to user-chosen color scheme		
5	Default background image (3, 15)		Background image initialized as one of the default presets		
6	User custom background image (3)		Background image changes according to user's uploaded choice		

7	Bible verse	Bible verse displayed in
	window	its Bible verse window
8	Bible verse	Bible verse window
	window opacity	opacity changes
		according to setting scale
9	Bible verse	Bible verse window
	window coloration	coloration changes
		according to chosen color
10	Bible verse	Bible verse window
	window sizing	changes according to
		chosen size
11	Bible verse	Bible verse window
	window position	changes to preset
	(presets) (4)	positions accordingly
12	Bible verse	Bible verse window
	window position	changes positions
	(user drag-and-	according to user's drag-
	drop) (4)	and-drop cursor position
13	Text size options	Verse text size changes
		according to chosen size
14	Text font options	Verse text font changes
	(preset)	according to chosen
		preset
15	Text font options	Verse text font changes
	(user custom	according to user's
	upload)	uploaded choice
16	Text coloration	Verse text color changes
	<u> </u>	according to chosen color
17	Text alignment	Verse text alignment
	(preset)	changes according to
40	Bible Color	chosen preset
18	Bible Gateway sync	Bible Gateway verse
	(22)	appears the same as it
		does on the official
19	Daily Piblo yerses	website Bible Gateway's daily
19	Daily Bible verses	
	(default, 6)	verse appears the same as it does on the official
		website
20	User selected Bible	Bible Gateway's user
20	verses (8)	selected verse appears as
	verses (o)	it does on the official
		website
21	Random selected	Bible Gateway's random
<b>41</b>	Bible verses (7)	selected verse appears as
	Dible verses (/)	it does on the official
		website
		MEDDITE

22	Bible Gateway	User is logged into their
	sign-in	Bible Gateway account
23	Bible Gateway	User is able to post to
	social media post	their social media
	(10)	
24	Search bar synced	User is able to search
	with default	with their default
	browser (2)	browser
25	First-time user	The tutorial appears for
	tutorial (12)	first-time users upon
		initialization
25	Help button	The tutorial appears for
	tutorial (12)	users clicking the help
		button

- [LINK INSTEAD???]
- (Is this ok for now???)

# 4.3. Test Script(s)

- [LINK]
  - (TBA script for user testing, as they're sitting down)
- 4.4. Defect/Enhancement Logs
  - [LINK]
    - (TBA changes after testing, usually issues)
- 4.5. Test Reports
  - [LINK]
    - (TBA original test results + changes made and intended)

# 5. TEST ENVIRONMENT

- Developer Device
  - o Hardware: Dell Latitude 3520, Windows 10 Pro
  - Software: Google Chrome (latest version 117.0.5938.132)
  - o Network: multiple stable networks, vary often

# 6. TESTING SCHEDULE

• Dry Testing, Week 6

- o (single user, revise test procedure)
- Full Testing, Week 6-7
- Test Analysis and Revisions, Week 7-8

# 7. ASSUMPTIONS AND DEPENDENCIES

# 7.1. Assumptions

- The developer was able to implement all intended features.
- The testing environments accurately represent the variety of devices and configurations by users.
- Users have a basic knowledge of operating a browser and browser extensions.
- Users have v117.0.5938.132 or higher installation on Google Chrome for testing.
- Users have a stable and reliable Internet connection during test phase.

# 7.2. Dependencies

- Availability of the extension in the testing environment OS versions, Google Chrome, Google Chrome versions, etc.
- The sole developer using a capable device with all necessary features for development and testing.
- The developer fixes any identified issues and changes features according to user feedback during test phase.

# 8. APPROVALS

Name: Bryce Furrow

Role: Lead Developer, Lead Tester

Date: 9/30/2023

Signature:

Name: Dr. Sean Hayes

Role: Project Supervisor

Date: 9/30/2023

Signature: