# Revamping Firefox's Migrator

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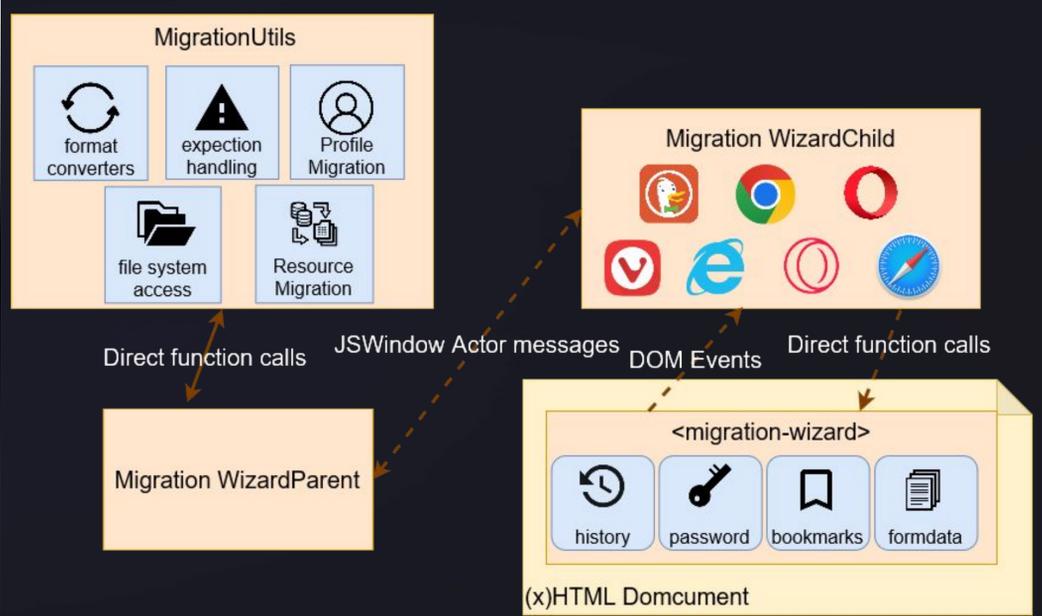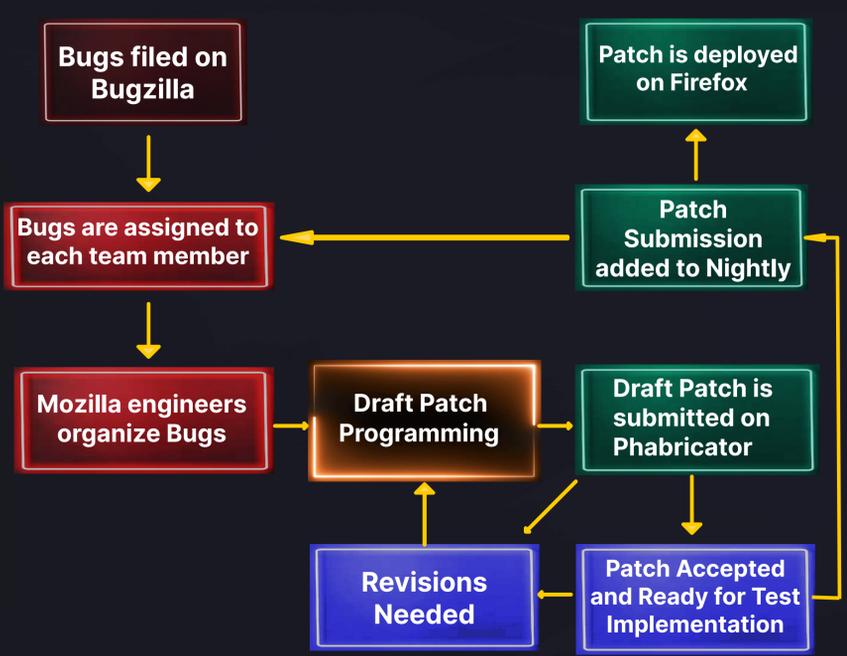California State University, Los Angeles

## BACKGROUND

Web browsers typically allow users to import/migrate their existing data, such as bookmarks. Although Firefox already had a migrator, it was clunky and outdated. Our senior design project aimed to address this issue, with our changes added to Firefox's public release.
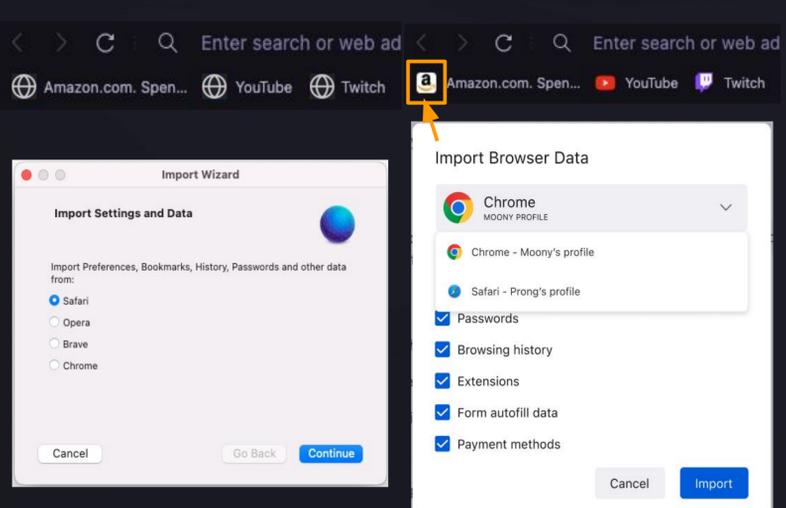
## OBJECTIVES

- Improve user experience
- Redesign the old user interface to be simpler with a modern theme
- Add migration support for more browsers and data
- Create unit tests for newly added features

## DEVELOPMENT PROCESS



Flowchart: Bugs filed on Bugzilla → Bugs are assigned to each team member → Mozilla engineers organize Bugs → Draft Patch Programming → Draft Patch is submitted on Phabricator → Patch Accepted and Ready for Test Implementation → Revisions Needed → Patch Submission added to Nightly → Patch is deployed on Firefox

**MigrationUtils:** format converters, expection handling, Profile Migration, file system access, Resource Migration

Direct function calls — Migration WizardParent

JSWindow Actor messages — Migration WizardChild

DOM Events / Direct function calls

<migration-wizard>: history, password, bookmarks, formdata
(x)HTML Domcument

## RESULTS



Before → After

| Browser Migrators | Safari | Chrome | Chromium Snap | Opera | OperaGX | Internet Explorer | Vivaldi |
|---|---|---|---|---|---|---|---|
| Import history and bookmarks | | ✓ | ✓ | ✓ | ✓ | | ✓ |
| Import bookmark favicons | ✓ | ✓ | | | | ✓ | ✓ |
| Import addresses | | ✓ | | | | | |