# MICHIGAN STATE UNIVERSITY Project Plan No More Yellow Screen Of Death

#### The Capstone Experience

#### Team Mozilla

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From Students... ...to Professionals

### **Functional Specifications**

- Ensure Yellow Screen of Death Never Displays
- By Converting Firefox's Localization to Fluent
- Support Over 100 languages of Firefox

## **Design Specifications**

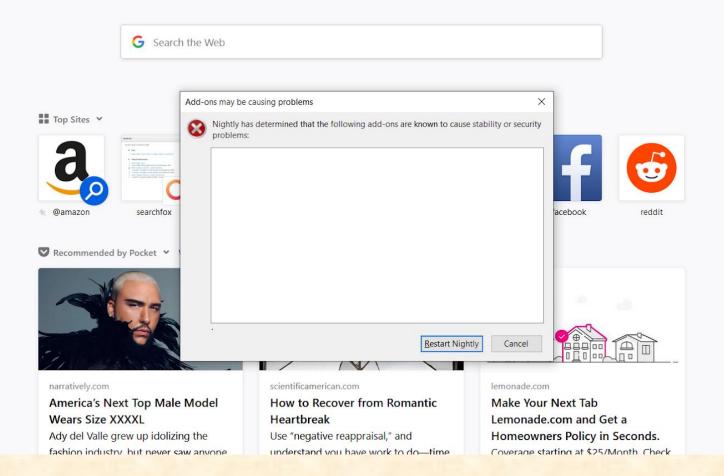
- Previous code is outdated and limited
- Asymmetric Localization (simple string -> complicated string in another language)
- Some Fluent features:
  - Plural Categories
  - Bidirectionality support
  - Easy-to-read syntax

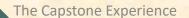
# Screen Mockup: Style Editor

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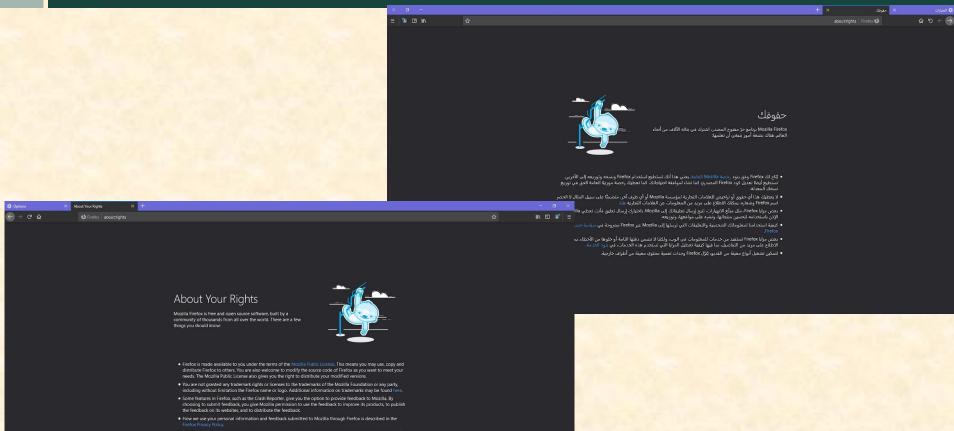


# Screen Mockup: Add-ons





# Screen Mockup: English-to-Arabic



- Some Firefox features make use of web-based information services, however, we cannot guarantee they are 100% accurate or error-free. More details, including information on how to disable the features that use these services, can be found in the service terms.
- In order to play back certain types of video content, Firefox downloads certain content decryption modules from third parties.

The Capstone Experience

Team Mozilla Project Plan Presentation

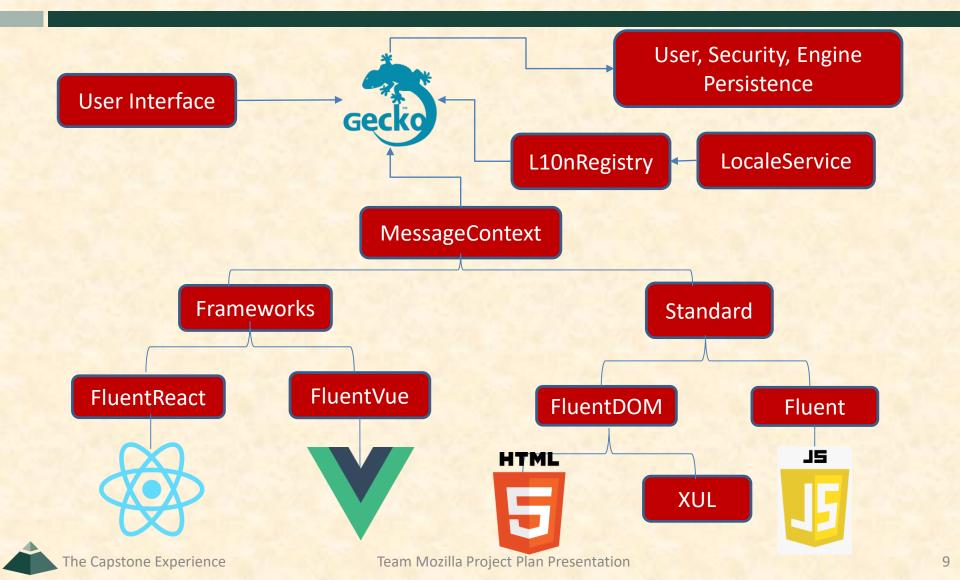
# Screen Mockup: Reset Password

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# **Technical Specifications**

- Windows/Mac
- HTML
- Fluent
- JavaScript
- Mercurial
- Phabricator
- Python

# System Architecture



#### System Components

- Software Platforms / Technologies
  - Firefox Nightly build
  - Visual Studio/Atom
  - Phabricator
  - Mercurial

#### Risks

- Breaking underlying part of codebase while creating migration script
  - The migration scripts from turning American English into other languages might run into, and break, unexpected underlying dependencies.
  - Debug then work with our mentors to try and anticipate problems beforehand. Barring that, then adjusting as we go.
- Firefox's Codebase is Massive
  - There are over 20 million lines of code for Firefox and learning to work with all the different parts might prove challenging.
  - Work through with the mentors to figure out which parts are the most crucial. Worst comes to worst can work through something with a debugger.

#### • Fluent is an immature technology

- Because Fluent will be integrated across the browser, this will open many areas for edge cases.
- We will communicate effectively with our mentors and amongst ourselves Integrating Fluent across the browser stack is complex
- Because Fluent will be integrated across the browser, this will open many areas for edge cases.
- We will communicate effectively with our mentors and amongst ourselves

### **Questions?**

