MICHIGAN STATE
U N I V E R S I T Y

Project Plan
Reader Mode for Desktop Firefox

The Capstone Experience

Team Mozilla

Micheal Anderson
Chelsea Carr
Matthew Vorce
Kevin Woodward

Department of Computer Science and Engineering
Michigan State University

Fall 2012

From Students…
…to Professionals

Project Overview

- Reader mode for desktop Firefox
- Reading list for saving reading content for later viewing
- Easy syncing between different devices

Functional Specifications

- Reader mode will feature a significant user interface change when compared to normal web browsing through Firefox

- Reader mode will present important information from websites in a clean and simple format

- Reading List will work in a similar fashion to bookmarks

Design Specifications

- Use of Readability.com API for determining what content to display

- Tie in to existing bookmark functionality when creating reading list

- Extend existing Firefox Sync functionality to handle reading list

- Build upon Mozilla's open-source code base

Screen Mockup: Reader Mode

Screen Mockup: Reading List
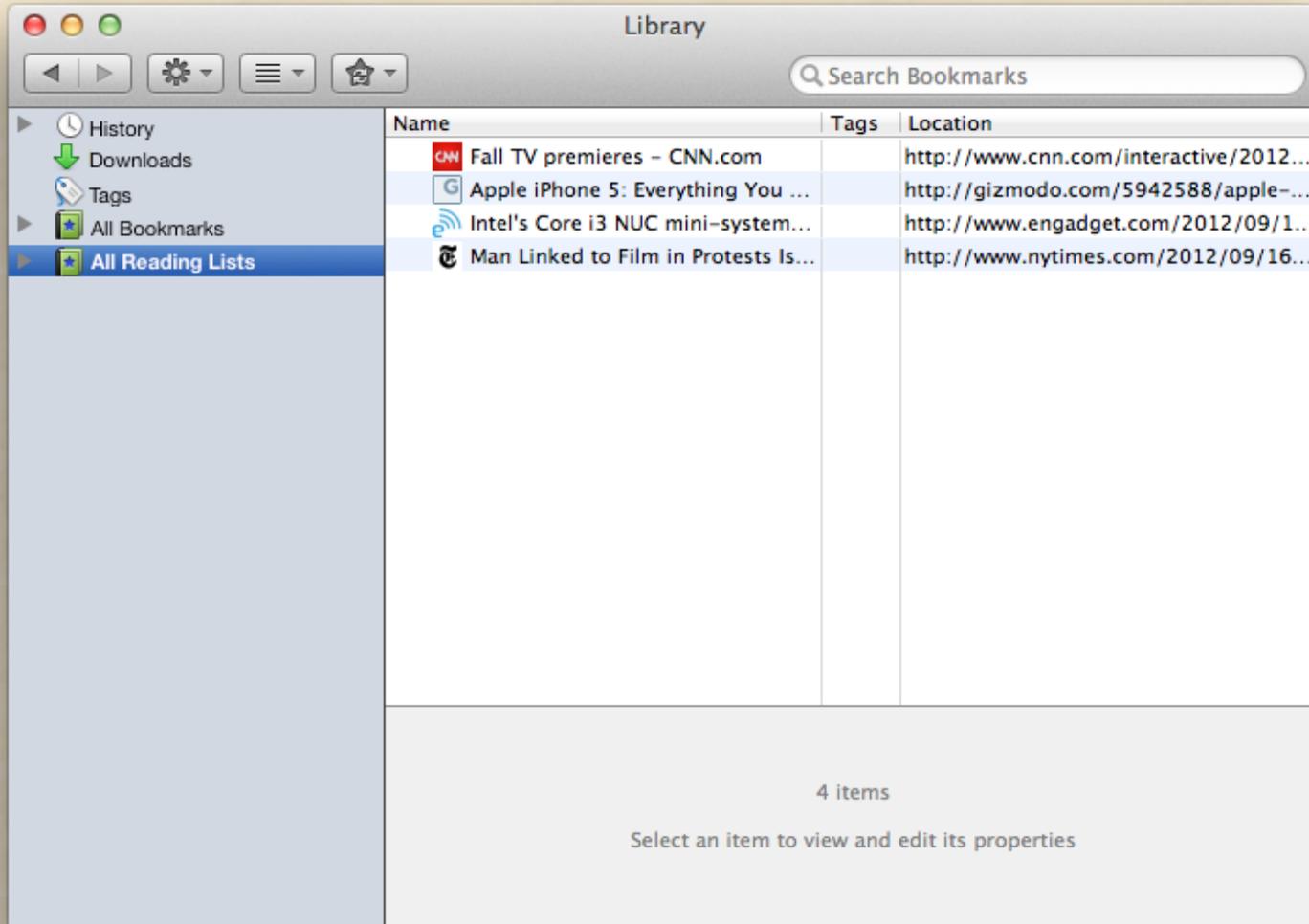
Technical Specifications

- JavaScript will be used to obtain data for reader mode to display

- JQuery will be used to bring up the window overlay for reader mode

- Window is styled with CSS and structured with HTML and XUL

- Reading List is cached in a SQLite database

System Architecture
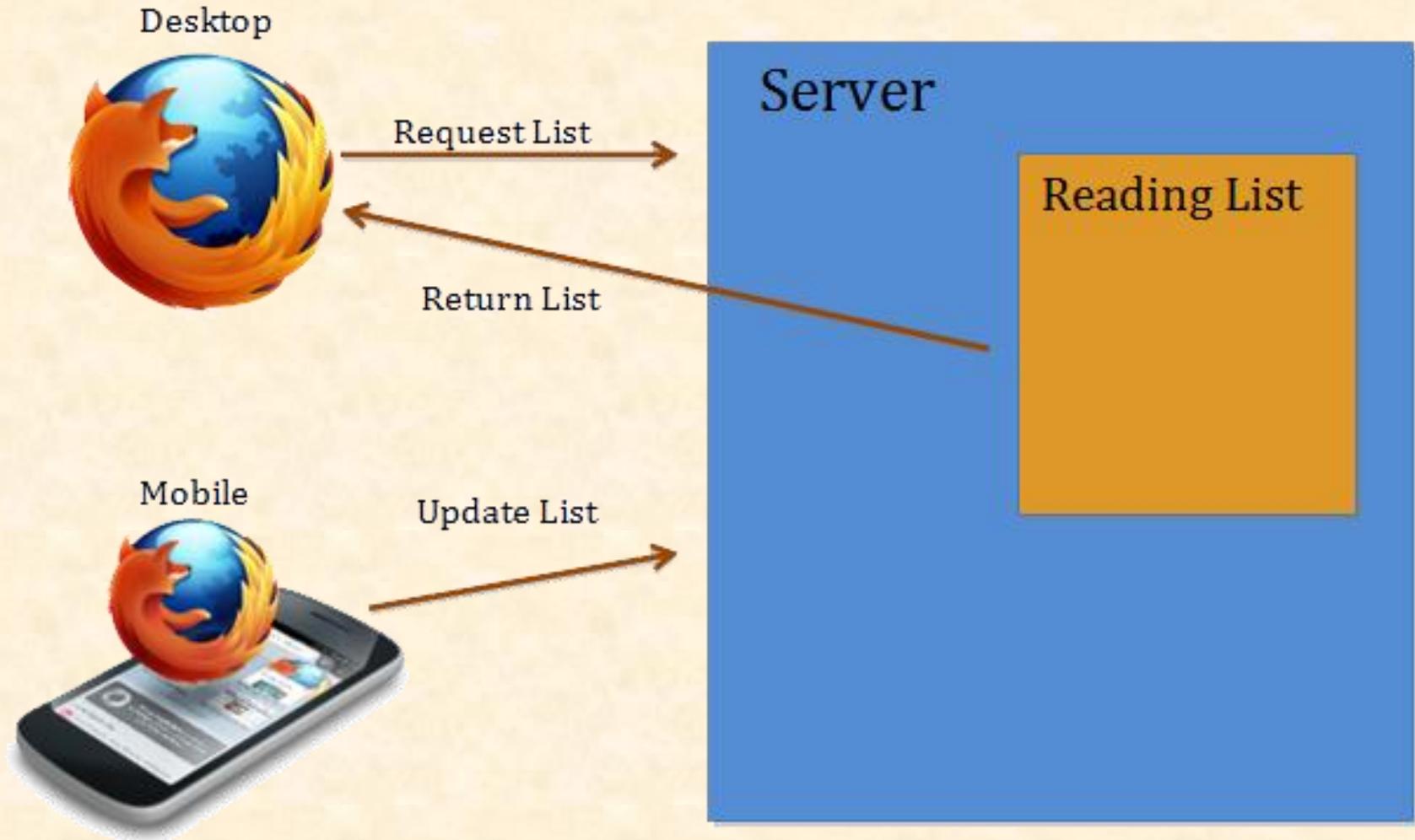
System Architecture
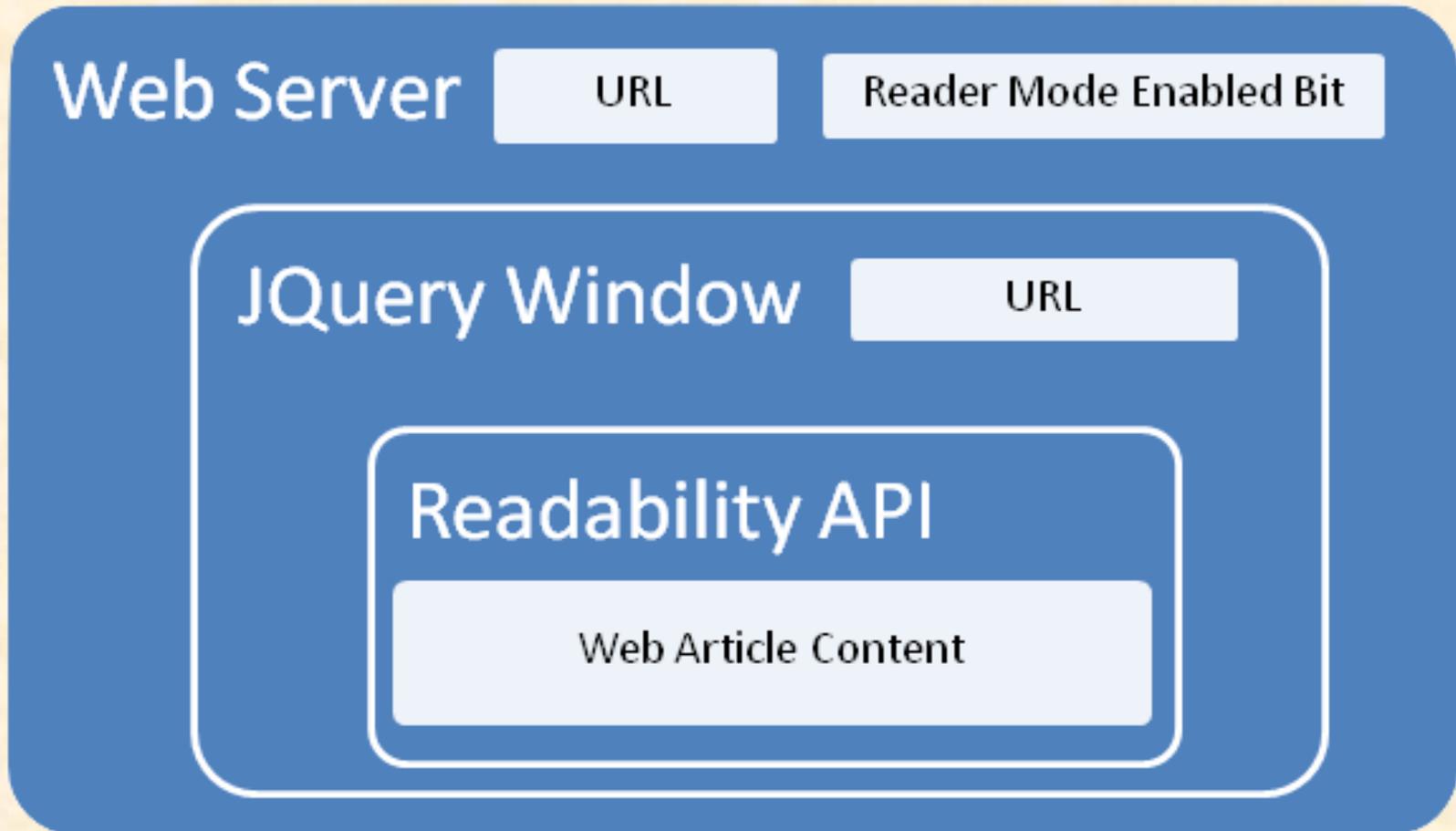
System Components

- Hardware Platforms
    - Web
    - Android
- Software Platforms / Technologies
    - JavaScript
    - HTML / CSS
    - XUL

Testing

- Mochitests
- Browser Tests
- Unit Tests
- Tinderbox Push Log

Risks

- Firefox Sync
  - Research into existing bookmark syncing and how that interacts between the desktop and mobile platforms
- Bugzilla
  - Fix simple bugs to learn process of pushing changes to Mozilla source
- Web Development
  - Learn from Chelsea
  - Follow tutorials
- Readability.com API
  - Look into how this API was used for Android Reader Mode