# SE31520

# Developing Internet-Based Applications

## Enhancing the CS-Alumni Application

Submission Due 4pm Monday, Decemeber 8, 2014

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# Contents

# Document Summary

# Application Design

## CS-Alumni Chrome Browser Extension

### Rational
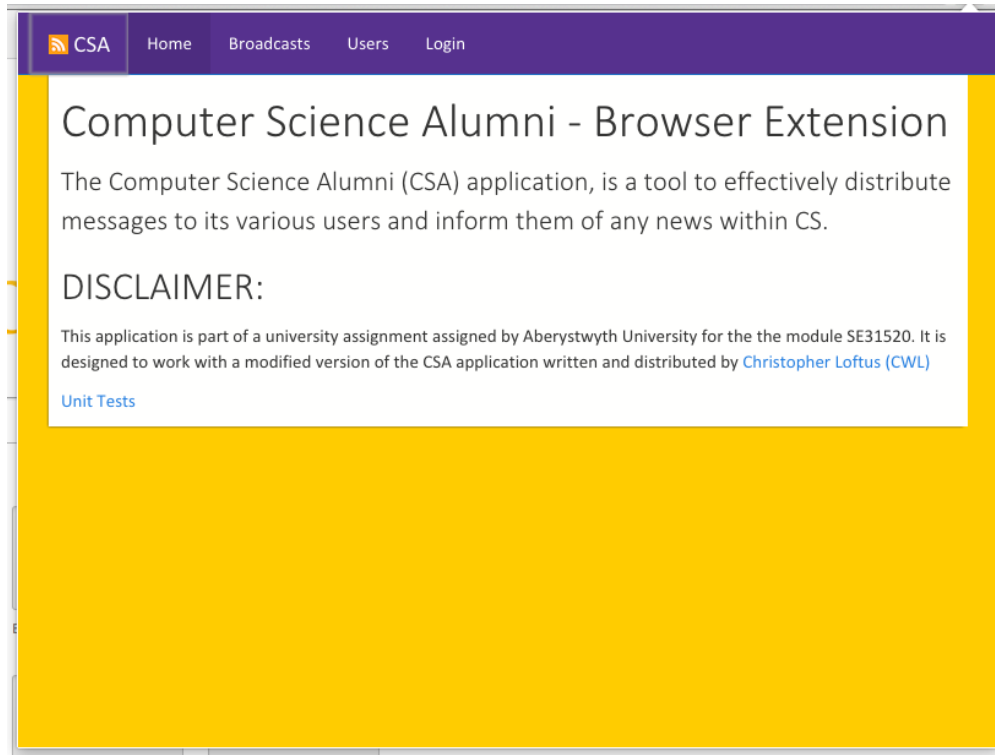
### Module Diagrams

### Program Operation



Figure 1: The screenshot above is the landing screen for the browser extension.
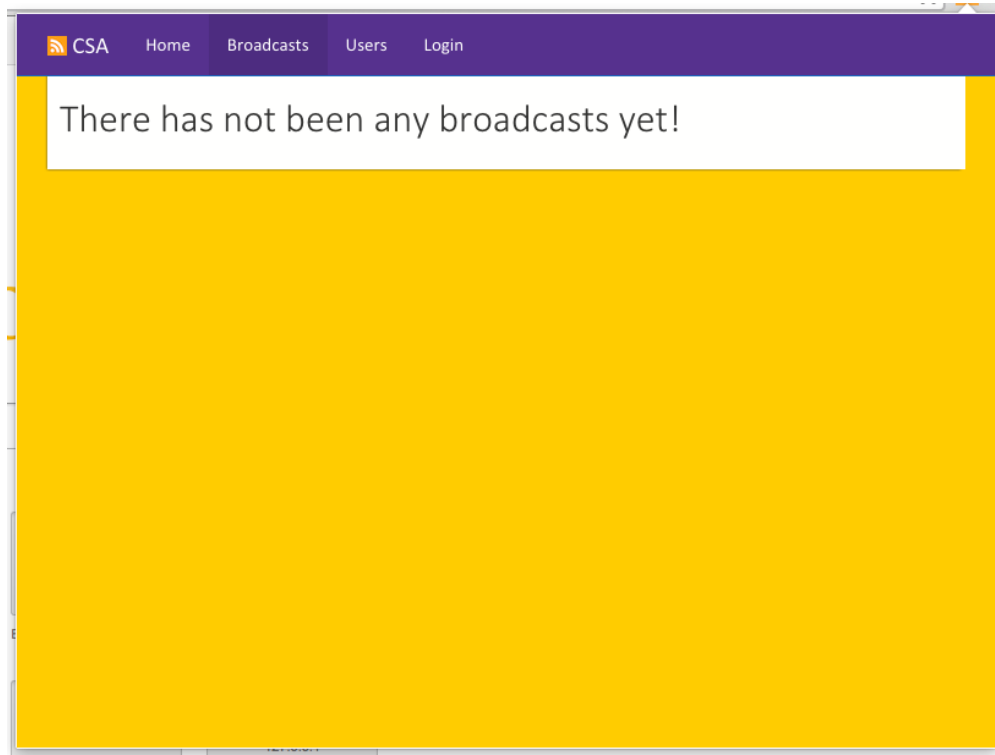
Figure 2: Above we see the broadcasts screen with no broadcasts available.
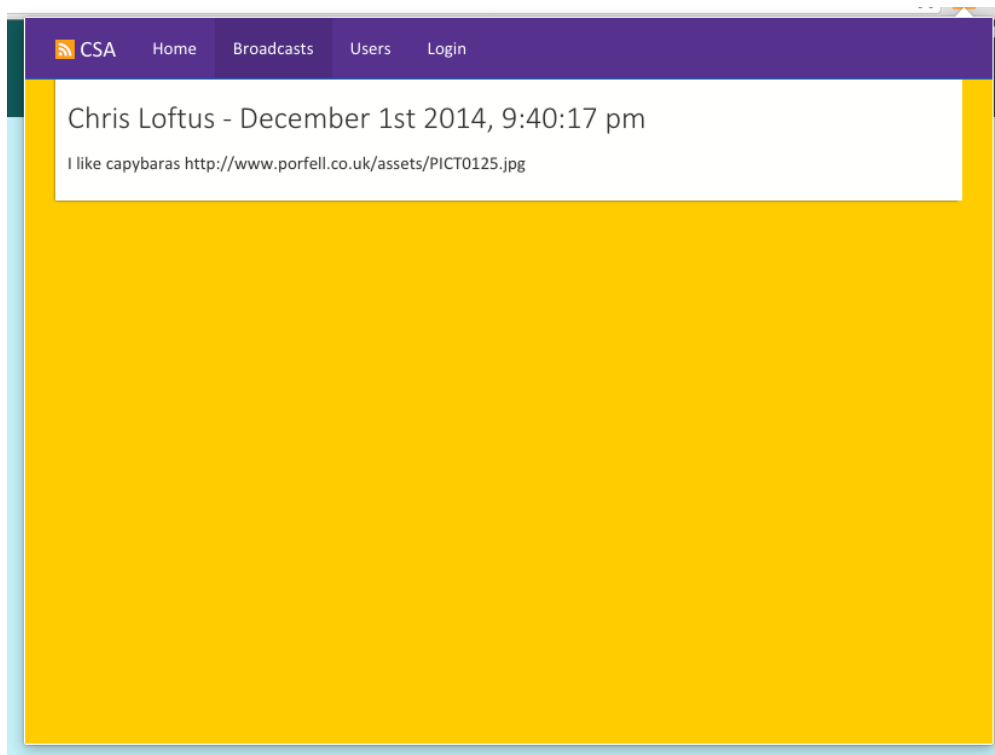


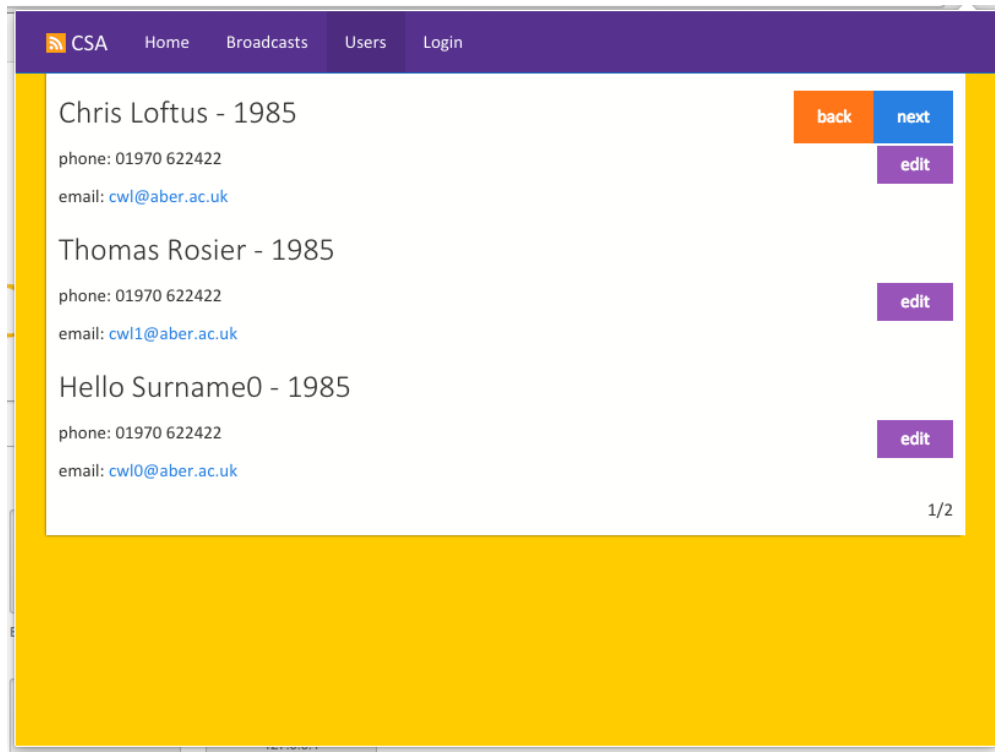Figure 3: This is what the populated broadcast screen looks like.

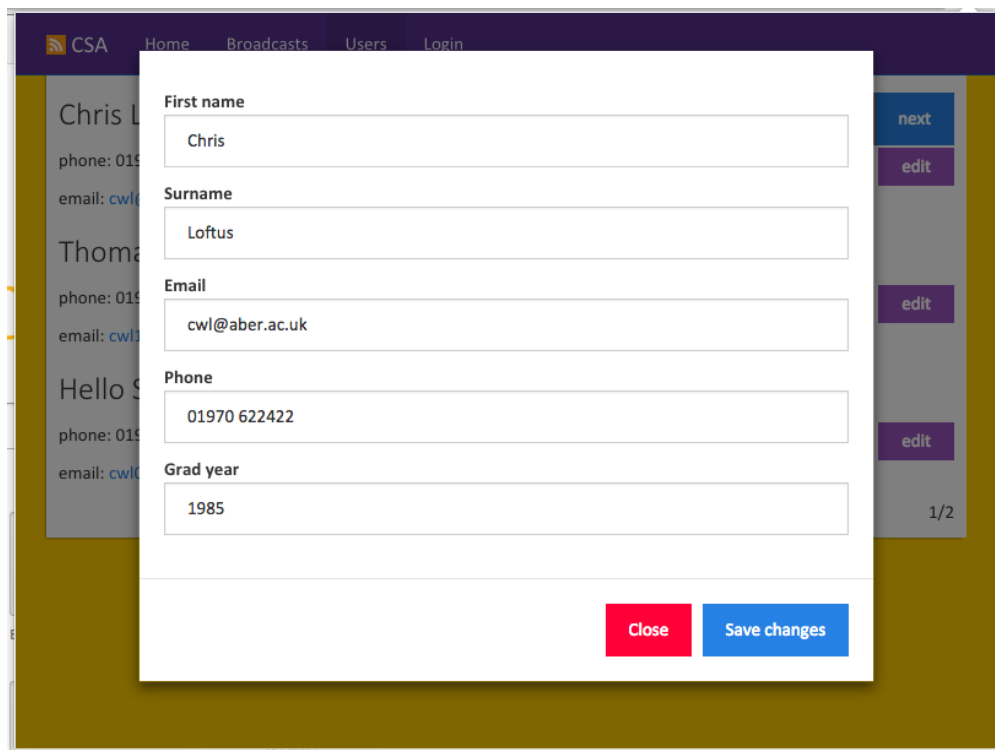Figure 4: Here we have a screenshot of the user's screen.



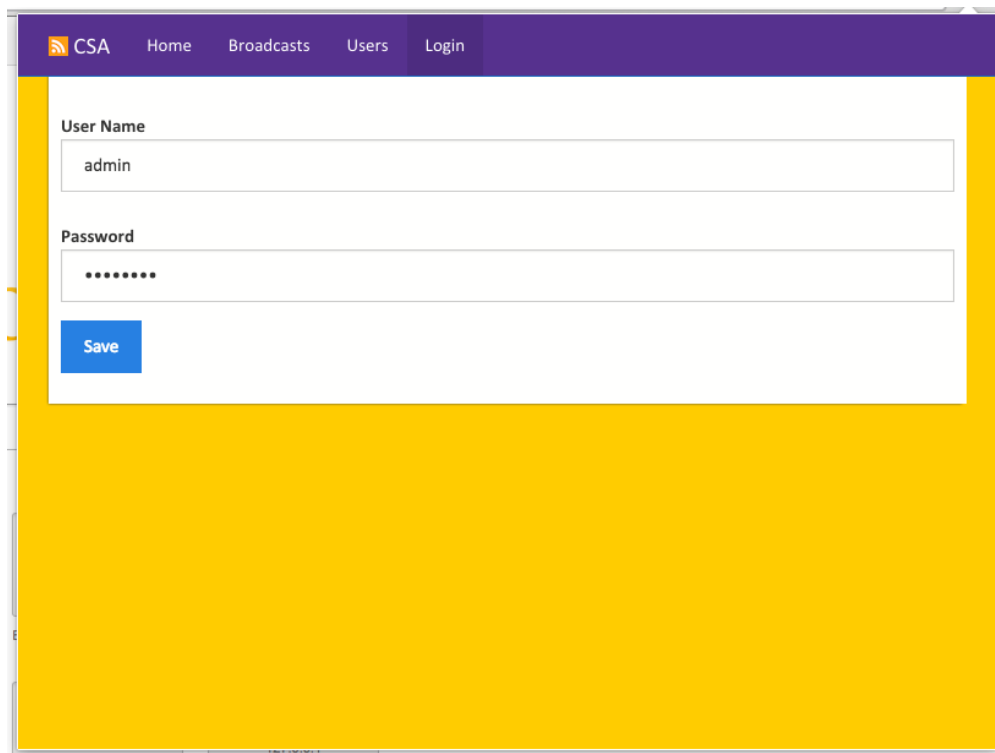Figure 5: Above we have a screenshot showing the appearance of the modal window we used to edit the user information.

Figure 6: This is a screenshot of the login screen.



Figure 7: This is the unit tests for the background.js module for the browser extension.

Figure 8: This is the unit tests for the background.js module for the browser extension.



Figure 9: This is the unit tests for the background.js module for the browser extension.
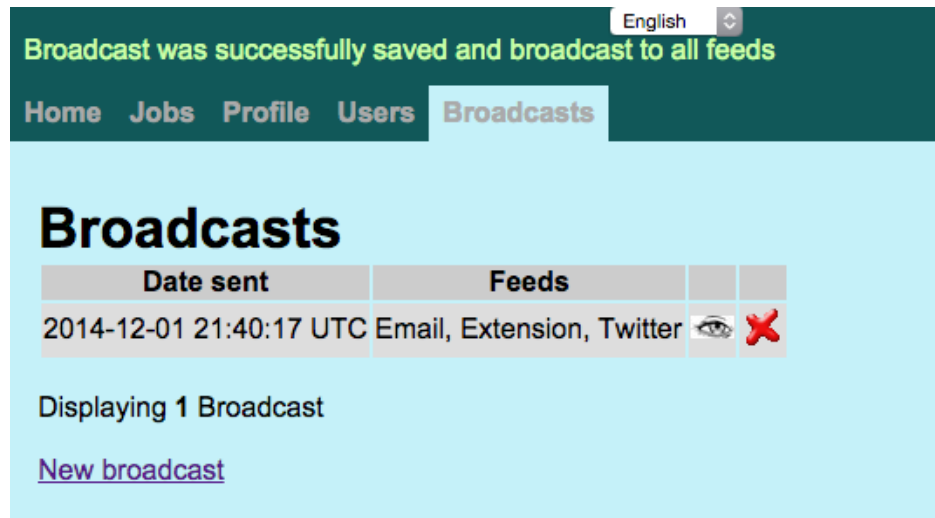


Figure 10: This is the unit tests for the background.js module for the browser extension.
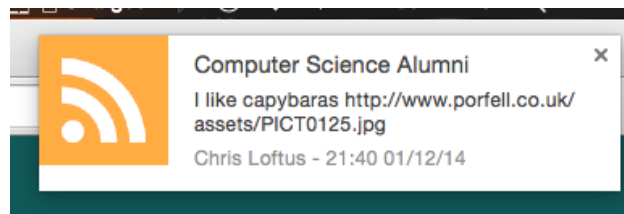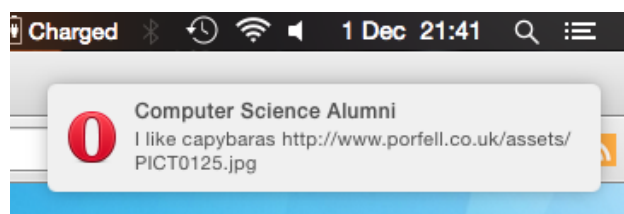
Figure 11: This is the unit tests for the background.js module for the browser extension.



Figure 12: This is the unit tests for the background.js module for the browser extension.

Figure 13: This images shows the browserinfo.js module completing its tests successfully.



Figure 14: This shows the LocalStorage.js module passing all its unit tests.

## Rest Tool Kit- Unit Tests.



Figure 15: Above we see the RestToolKit.js module successfully completing all its unit tests.

## Utils.js – Unit Tests.



Figure 16: Included above we see the Utils.js module efficiently complete all of its unit tests.

## CS-Alumni Rails Application

**New Additions**

**Modifications**

## Communication Between Applications

**RESTful Web Interfaces**

**Data Flow Diagrams**

# Application Testing

**QUnit Tests**

# Technologies

## CS-Alumni Rails Application

## Communication Between Applications

# Evaluation

# Something Extra

Figure 17: Above is a image of the Pebble smartwatch running the CSA application.



Figure 18: This is a screenshot taken from the Pebble smartwatch.

# Attributions

# References

[1]  Mark McDonnell. *SQLite and ActiveRecord*. Oct. 2013. URL: http://www.integralist.co.uk/posts/sqlite-and-activerecord/.

[2]  Daniel Morrison. *Building Awesome Rails APIs: Part 1*. June 2013. URL: http://collectiveidea.com/blog/archives/2013/06/13/building-awesome-rails-apis-part-1/.