OSX Menubar Topcoder Challenge
Alertinator
Deployment Guide

Revision History

Author	Revision Number	Date
TCASSEMBLER	1	22/09/14

Deployment Instructions

1. Organization of Submission
   - TopSignal → Contains the xCode project
   - DeploymentGuideAlertinator.doc → This guide
2. Application Setup

The solution has been built using Version 6.1 Beta 2 (6A1030). This version is mandatory as older versions will give syntax errors

Simply open the Xcode project, build and run

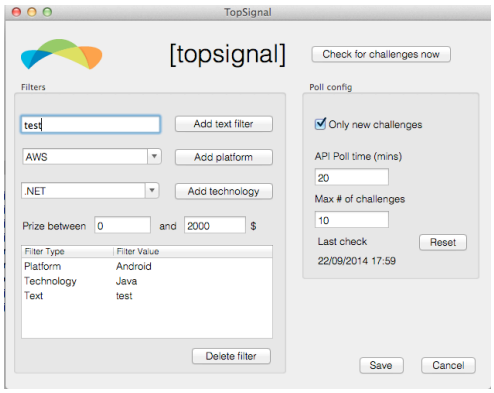
3. Class overview
   - Models
     - Configuration → This holds the user config that is stored on UserDefaultValues
     - Filter → Represents a filter, with a filter type and value
     - Challenge → Represents a Challenge, with challenge id, title and registration date
   - Lib
     - SwiftyJSON → This is the only external lib used, parses JSON
   - Config
     - AppConfig → Holds static config values, as the combo values
   - Services
     - TopcoderService → Topcoder API functionality
     - NotificationService → Handles notifications
     - ConfigurationService → retrieves and saves configuration values
   - AppDelegate → Main application entry point and config window delegate
4. Solution

4.1. Video

There is a video of the solution in action here: https://www.youtube.com/watch?v=Cz-1ND-dkd0

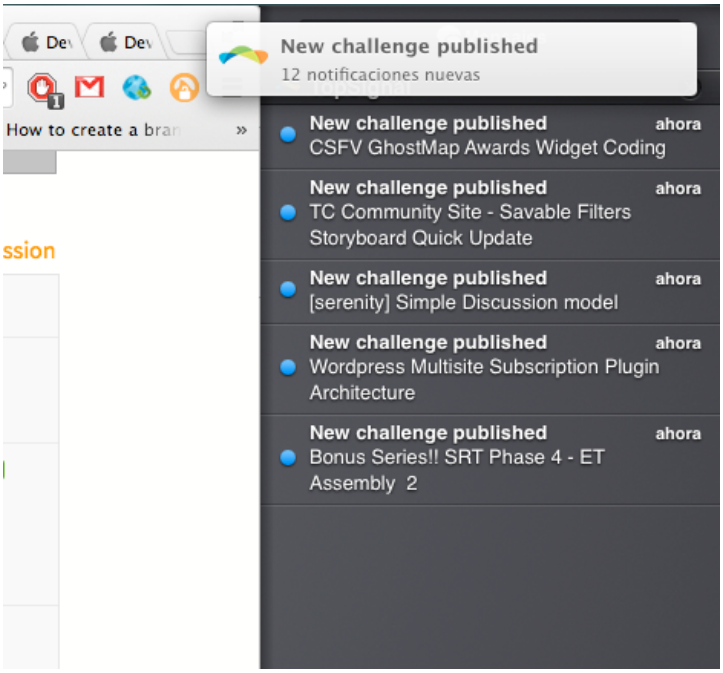
4.2. Overview

The challenge was to build an app to generate alerts for new challenges. This is the config window:



- Check for challenges now → This button is for testing purposes. Performs an API query regardless of the timer
- Filters box → these controls the parameters for the query
  - Filters for platform
  - Filters for technology
  - Filters for text
  - TotalPrize range
  - Filters are shown on the table, and can be deleted with the "delete filter" button.
- Poll config box
  - Only new challenges → we can set if we only want new challenges displayed. This value is not stored on the configuration and is meant for testing purposes only.
  - API poll time → this is the time interval to check for new challenges
  - Max # of challenges → Max number of challenges to retrieve at the same time from the API
  - Last check → Shows the timestamp for the last check. Only the challenges with registrationDate between last checked and now will generate a notification in order to not repeat themselves
  - Reset → This is for testing purposes. By clicking it, the last check timestamp is decremented on 24 hours, allowing to show notifications for the challenges published on the last 24 hours

Once clicked on the notification, the default browser is opened showing the challenge



5. Issues

5.1. Topcoder API

See http://apps.topcoder.com/forums/?module=Thread&threadID=831826&start=0 . Right now there are the following issues with the API:

- API not filtering by registrationDate → fixed by filtering client side
- API not filtering by prize range → fixed by filtering client side, included in the query for the future
- API not filtering by pageSize → not an issue but adds overhead for big queries

5.2. Swift serialization

Right now is not possible to serialize complex objects on NSUserDefaults with pure swift, so I have implemented a solution using JSON as suggested here:
http://stackoverflow.com/questions/24659609/how-to-archive-and-unarchive-custom-objects-in-swift-or-how-to-save-custom-obje

6. *Highlights*
   - *Fully configurable, stores config for the same user*
   - *Redirects to topcoder on notification click*
   - *Executes as agent with only an icon on menubar*

7. Resource Contact List

Name	Resource Email