Android Application Technical Test
Carousels

Objective:

Create a Xamarin based application exhibiting MVVM pattern which runs on Android devices.
Users should be able to scroll a vertical list of elements, which each element capable of being independently scrolled horizontally.

No tasks must be changed by the candidate. In case of uncertainty, please contact the employer.

Primary tasks:
- Single activity application (use fragments/action bar as required).
- Tablet form factor
- Replicate the iOS Carousel demo application (see screenshot below).
- Implement a vertical RecyclerView (taking up all available screen size), which consists of child RecyclerViews of horizontal orientation. All horizontal rows must scroll independently of each other (no Grid arrangement).
- Async load and show a 2D data array of simple title/image elements.
- Titles can be randomly generated, images should async load as they are shown on screen from random images generated by http://www.colourlovers.com/api/patterns/random (imageUrl field)
- Clicking on a screen element should display a toast of the Title
- No third-party code/libraries must be used for UI

Bonus Tasks
- Instead of using a toast, add a full screen semi-transparent overlay of the title/image on element click
- Add a Splash screen which disappears to reveal all initial elements loaded.

Evaluation criteria:
- All primary tasks completed.
- Objective oriented design with clearly separated and loosely linked entities (use MVVM, MVC or other classic patterns).
- Good use of caching (file, memory caching; data preloading)
- Usage of data structures
- Clear concise layout files
- Use Multithreading/Asynchronicity when needed

Deliveries:
- Source code and this document with release notes available through GitHub or other Git/SVN public repository
- The source code must compile with no errors on Android/iOS environments
- The repository must contain a prebuilt Android binary (APK) compiled in Release configuration