



Test Task for Apple Developer Candidate

Some API returns list of channels and programs for these channels in JSON format. Contracts described below:

```
// Class describes channel
public class Channel
{
    public int orderNum { get; set; } // order of the channel in the TV Guide
    public int accessNum { get; set; } // Channel access and display number
    public string CallSign { get; set; } // Channel CallSign - shown in TV Guide - don't worry if it is long -
    truncate it
    public int id { get; set; } // channel ID
}
// Class to join programs and channels
public class RecentAirTime
{
    public int id { get; set; } // program item ID
    public int channelID { get; set; } // its channel ID
}
// Class describes Program Guide item
public class ProgramItem
{
    public DateTime startTime { get; set; } // program item start time in UTC
    public RecentAirTime recentAirTime { get; set; } // program item ID and channel ID the program belongs to
    public int length { get; set; } // program length in minutes
    public string shortName { get; set; }
    public string name { get; set; } // Program name to display. Don't worry if it is too long, truncate it
}
```

The mockup API responses are available at:

- <https://demo-c.cdn.vmedia.ca/json/Channels>
- <https://demo-c.cdn.vmedia.ca/json/ProgramItems>

The mockup API returns 30 channels and programs for two days.

The test application should display TVGuide from API as shown in mockup design below. (Do the design as simple as possible; do not add images for channels as you do not have them)

TODAY, JULY 9		05:00 PM	05:30 PM	06:00 PM	06:30 PM
1	CKMIDT Global	The Young and the R...	Global News at 5:30	Global National	Global News at 6:30
2	CHCHDT CHCH	Cheers	Happy Days	Evening News at 6	Inside the
3	SHCSCHD SHOW CASE	NCIS	NCIS	NCIS	NCIS
4	RVLT REVOLT	The Breakfast Club Power Hour 05:00 PM		Funny AF	Internationally Known
5	ADSM [adult swim]	Bob's Burgers	Bob's Burgers	Family Guy	Family Guy
6	HISTHDC HISTORY	American Pickers	American Pickers	American Pickers	American

User should be able to scroll up/down and left/right through all channels and all available programs.

Most important in this task is creating extendable architecture, which will allow lazy-loading and caching of program items in the future. Also please, use object-oriented approach wherever it is possible to make the application easy maintainable and more robust.

What we expect eventually as the result of this task, 2 pages:

1. First page with development (architecture) plan how this part should be implemented. Please, use SWIFT, Viper, Diffable Datasource(optional) and Swagger to build contracts from API.
2. Second page with sample code – just a page with your code of some part of this task. No matter what exactly would be coded. In fact, we just want to see how you code in terms of using object-oriented approach.

Preferable to have this for tvOS.

Usually, we expect developers to complete test assignments in 1 week.