iOS Add2App Life Cycle Test

This application demonstrates some basic functionality for Add2App, along with a native iOS ViewController as a baseline and to demonstrate interaction.

The following functionality is currently implemented:

- 1. A regular iOS view controller (UIViewController), similar to the default flutter create template (NativeViewController.m).
- 2. A FlutterViewController subclass that takes over the full screen. Demos showing this both from a cold/fresh engine state and a warm engine state (FullScreenViewController.m).
- 3. A demo of pushing a FlutterViewController on as a child view.
- 4. A demo of showing both the native and the Flutter views using a platform channel to interact with each other (HybridViewController.m).
- 5. A demo of showing two FlutterViewControllers simultaneously (DualViewController.m).

A few key things are tested here (IntegrationTests.m):

- 1. The ability to pre-warm the engine and attach/detach a ViewController from it.
- 2. The ability to use platform channels to communicate between views.
- 3. The ability to simultaneously run two instances of the engine.
- 4. That a FlutterViewController can be freed when no longer in use (also tested from FlutterViewControllerTests.m).
- 5. That a FlutterEngine can be freed when no longer in use.