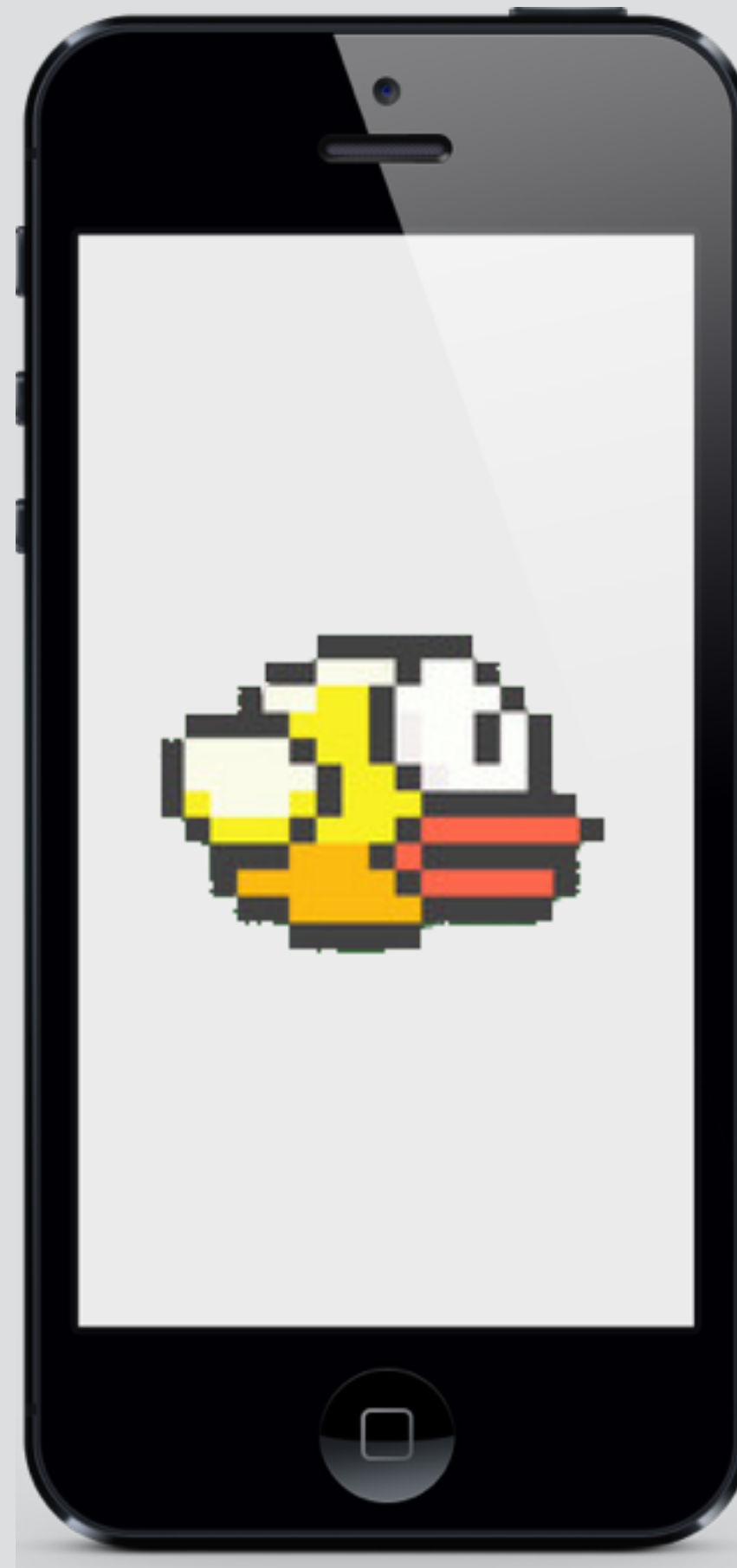


Mobile games



ios

Setting up an iOS Xcode project

Use the template under **project_template/iOS**

Keep in mind that the include and library paths are setup relative to the project, so if you move the template, you'll need to change the header and library search paths.

Need to make a few tweaks to our code...

**Make the window size match the phone resolution
and use the appropriate aspect ratio.**

```
SDL_DisplayMode displayMode;  
SDL_GetCurrentDisplayMode(0, &displayMode);  
  
displayWindow = SDL_CreateWindow("My Game", SDL_WINDOWPOS_CENTERED, SDL_WINDOWPOS_CENTERED,  
displayMode.w, displayMode.h, SDL_WINDOW_OPENGL | SDL_WINDOW_FULLSCREEN);  
  
// OpenGL initialization  
  
glViewport(0, 0, displayMode.w, displayMode.h);  
float aspect = (float)displayMode.w/(float)displayMode.h;
```

Tell SDL to use OpenGL ES2 (before we create the OpenGL context)!

```
SDL_GL_SetAttribute(SDL_GL_CONTEXT_PROFILE_MASK, SDL_GL_CONTEXT_PROFILE_ES);  
SDL_GL_SetAttribute(SDL_GL_CONTEXT_MAJOR_VERSION, 2);  
SDL_GL_SetAttribute(SDL_GL_CONTEXT_MINOR_VERSION, 0);  
  
SDL_GLContext context = SDL_GL_CreateContext(displayWindow);  
SDL_GL_MakeCurrent(displayWindow, context);
```

Change OpenGL include to SDL_opengles2

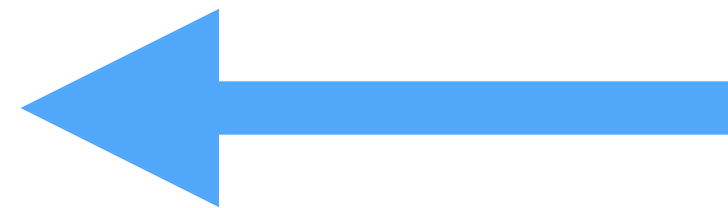
```
#include <SDL_opengles2.h>
```

Make sure our RESOURCE_FOLDER is empty.

```
#define RESOURCE_FOLDER ""
```


Prefix our shaders with precision information...

```
precision mediump float;
```



```
uniform sampler2D diffuse;  
varying vec2 texCoordVar;
```

```
void main()  
{  
    gl_FragColor = texture2D(diffuse, texCoordVar);  
}
```

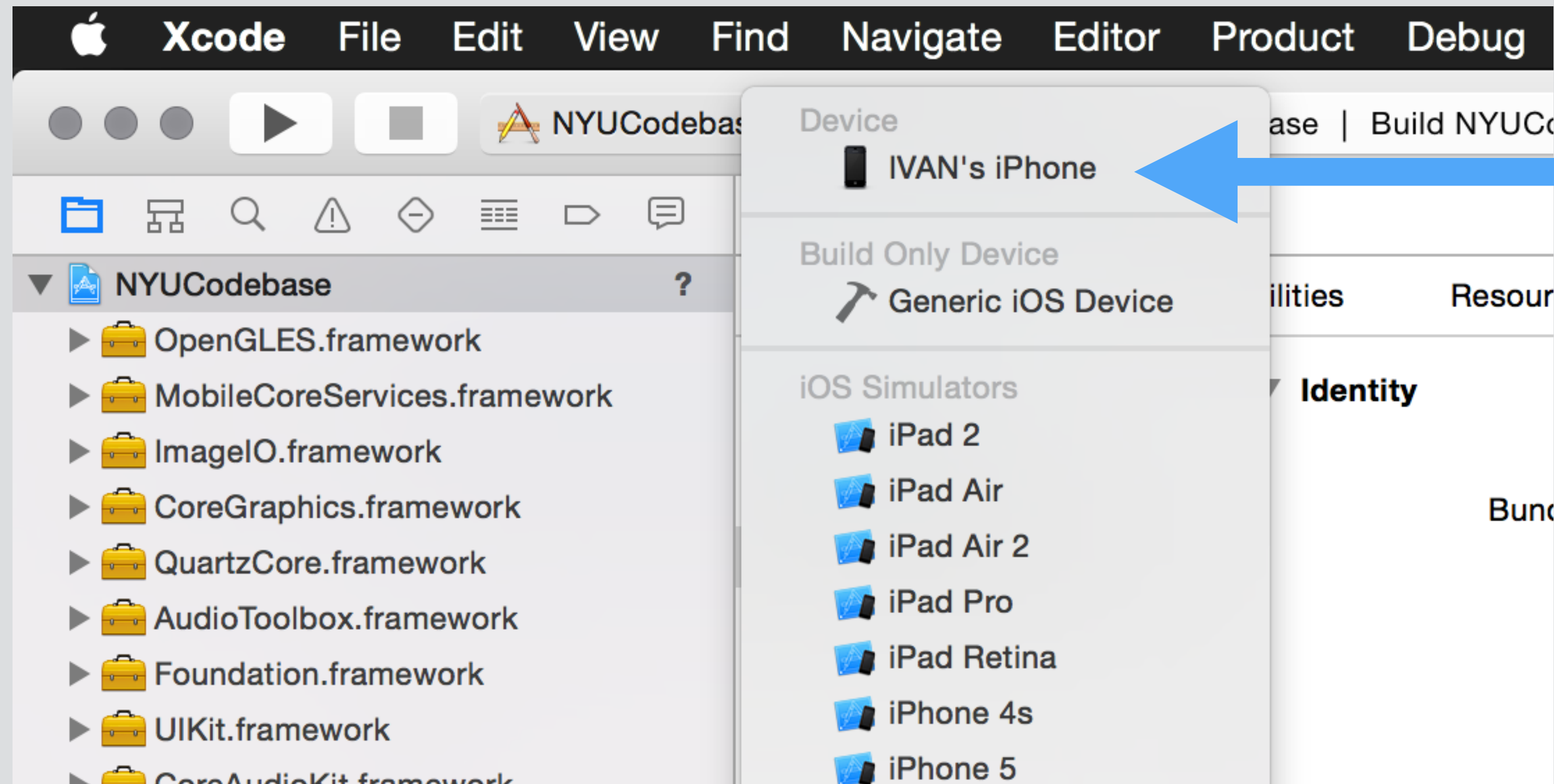
Input on a phone.

You can listen for 3 finger events: SDL_FINGERMOTION, SDL_FINGERDOWN, or SDL_FINGERUP

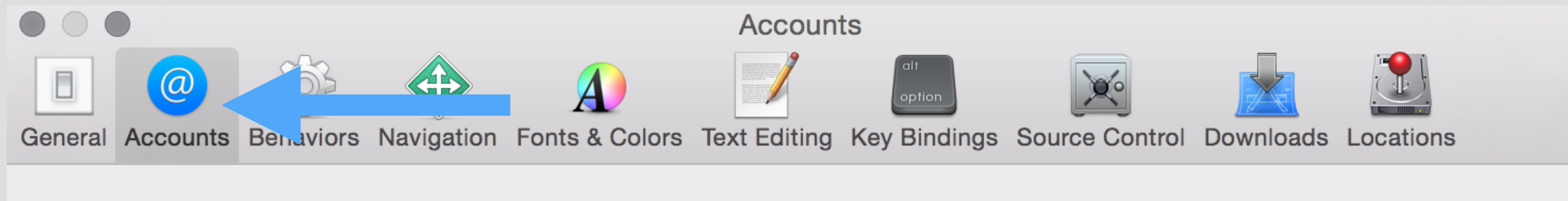
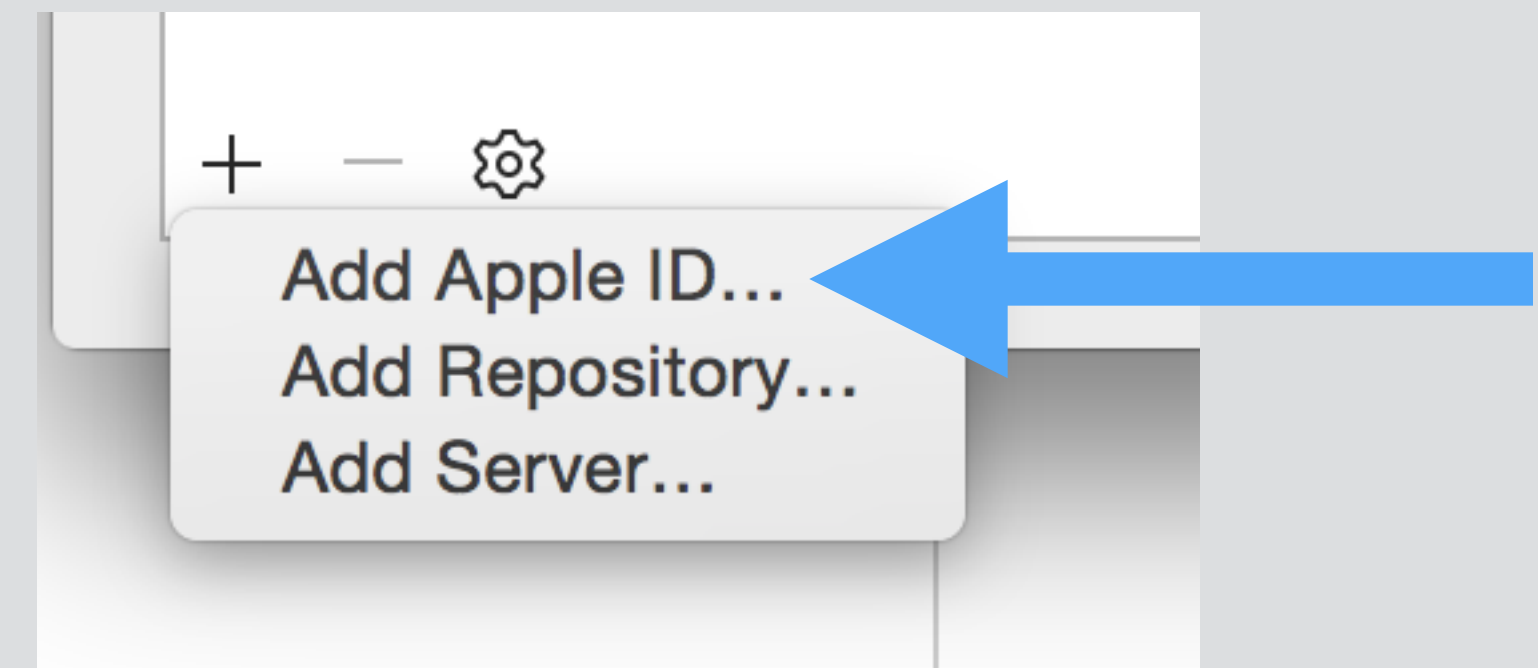
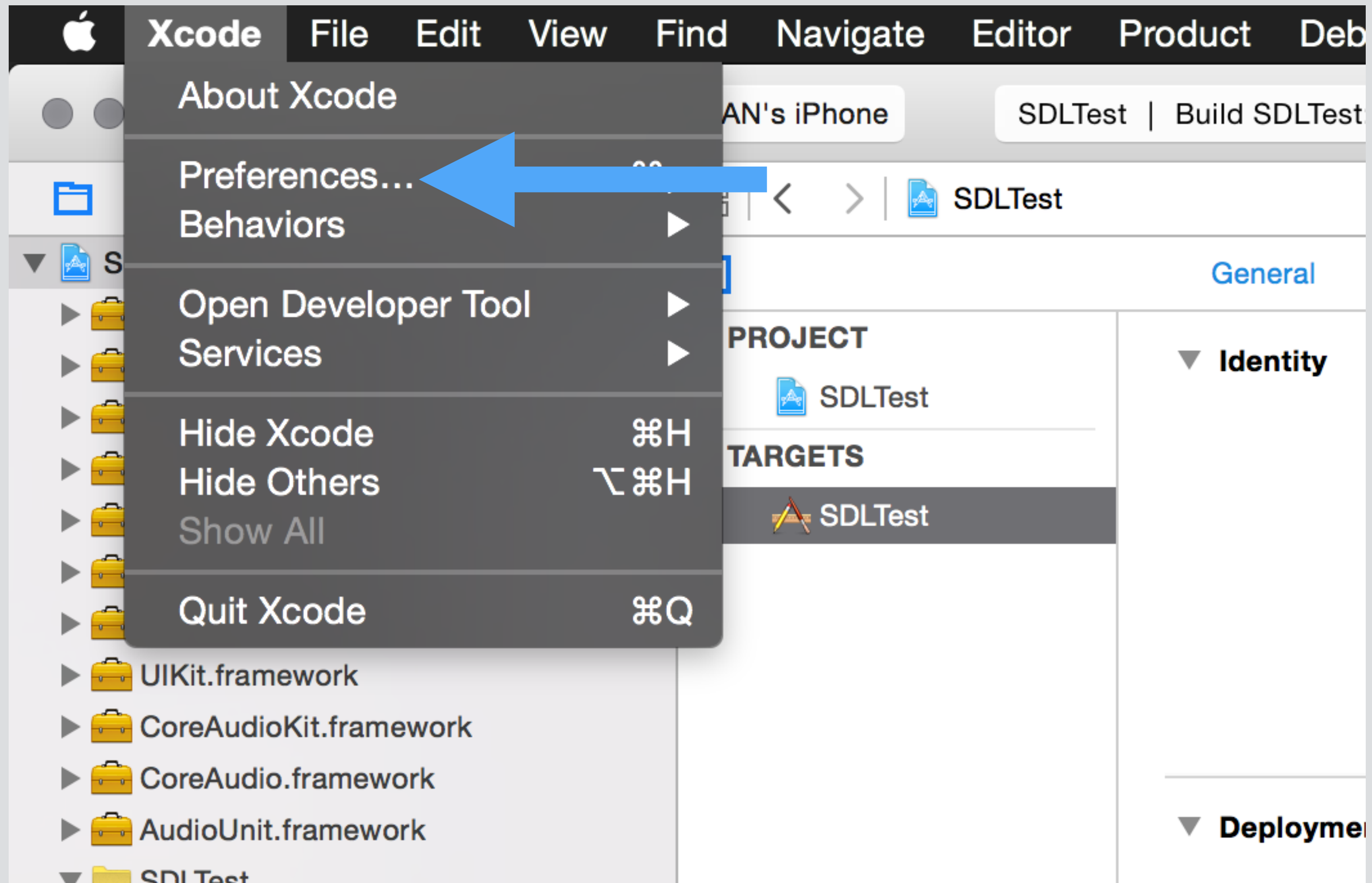
The **event.tfinger** structure will have fields **x** and **y** for the position (normalized 0-1) and fields **dx** and **dy** for delta movement position (normalized -1 to 1). Also the **fingerId** field will tell you which finger the movement events are for.

```
while (SDL_PollEvent(&event)) {  
    if (event.type == SDL_QUIT || event.type == SDL_WINDOWEVENT_CLOSE) {  
        done = true;  
    } else if(event.type == SDL_FINGERMOTION) {  
        camera.rotation.y += event.tfinger.dx * -1.0;  
        camera.velocity.z = cos(camera.rotation.y) * event.tfinger.dy * 300.0;  
        camera.velocity.x = sin(camera.rotation.y) * event.tfinger.dy * 300.0;  
    }  
}
```

Running it on your phone.



Must setup a developer to run as.



And set your project to use the phone
SDL libraries instead of the simulator ones.

Linking

Setting

Compatibility Version

Current Library Version

Dynamic Library Install Name

Dynamic Library Install Name

Mach-O Type

Perform Single-Object Prelinking

Re-Exported Framework Name

Re-Exported Library Names

Re-Exported Library Paths

Search Paths

Setting

► Library Search Paths

"/Users/ivansaf

"\$(SRCROOT)/../../libraries/ios/SDL_libs_simulator"

▼ Linking

Setting

Compatibility Version

Current Library Version

Dynamic Library Install Name

Dynamic Library Install Name

Mach-O Type

Perform Single-Object Prelinking

Re-Exported Framework Name

Re-Exported Library Names

Re-Exported Library Paths

▼ Search Paths

Setting

► Library Search Paths

"/Users/ivansaf

"\$(SRCROOT)/../../libraries/ios/SDL_libs_phone"

**Now run the project and select
your developer team profile if it's the first time!**



No Team Selected

A team must be selected to run 'NYUCodebase' on IVAN's iPhone

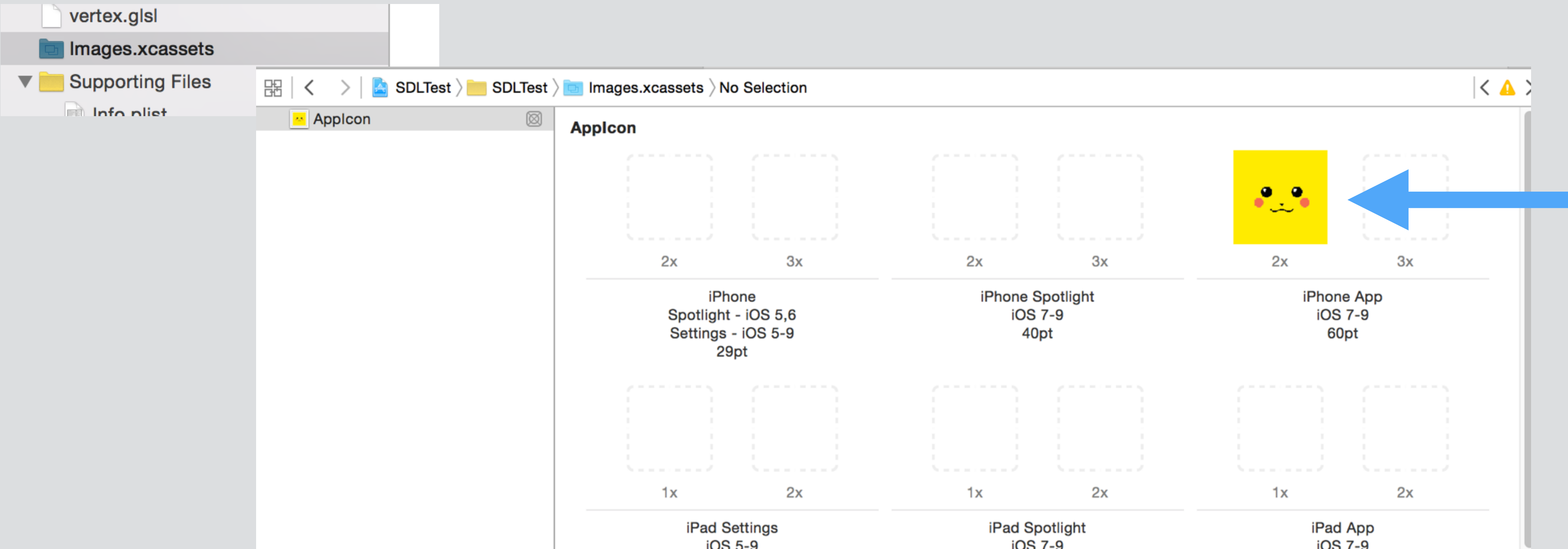
Cancel

Select Team

You will need to verify your developer team in your phone's settings under General -> Profile.

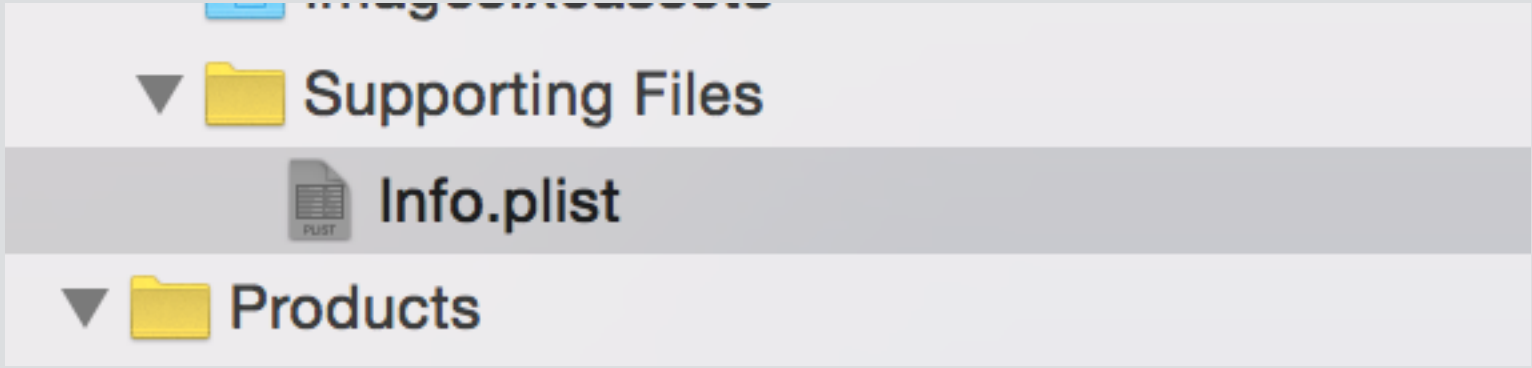
**You will need to get an Apple
developer account (\$99/year) if you want to
publish your game on the AppStore.**

Setting an icon for our app!



Drag a 120x120 pixel PNG image into this slot.

Running in landscape mode.



State bar is initially hidden	Boolean	YES
▼ Supported interface orientations	Array	(3 items)
Item 0	String	Portrait (bottom home button)
Item 1	String	Landscape (left home button)
Item 2	String	Landscape (right home button)
▼ Supported interface orientations (...)	Array	(4 items)
Item 0	String	Portrait (bottom home button)
Item 1	String	Portrait (top home button)
Item 2	String	Landscape (left home button)

In Info.plist, remove the Portrait device orientation support entry.

Thank you!