

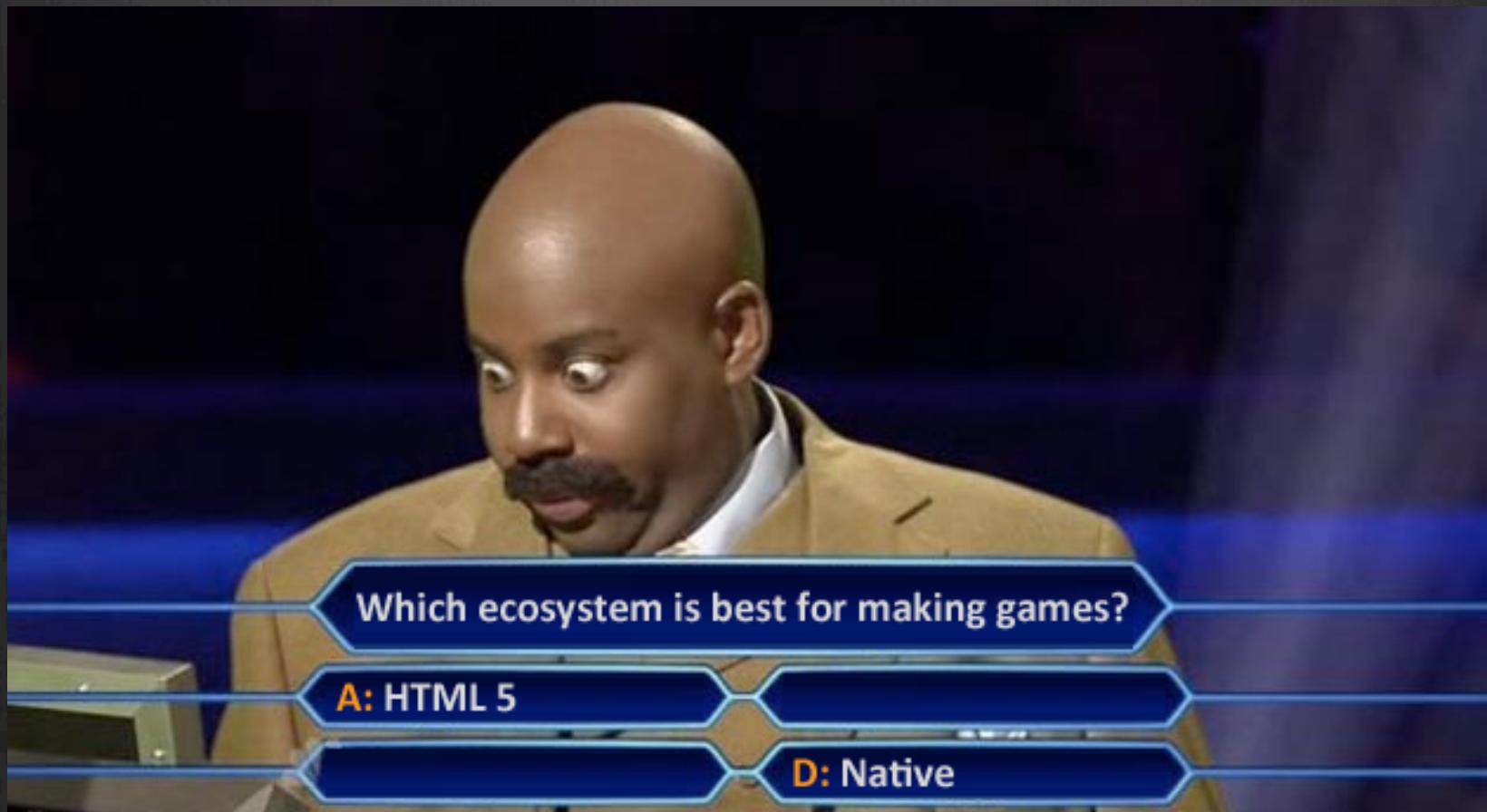
Ski Free

Using easel.js and other things ...



Sugendran Ganess
@sugendran

Who wants to get rich?



The libraries

EASELJS – the canvas library

PRELOADJS – asset preloader

TWEENJS – animation library

SOUNDJS – sound library

Meet the sprites



The Person



The Rock



The Tree

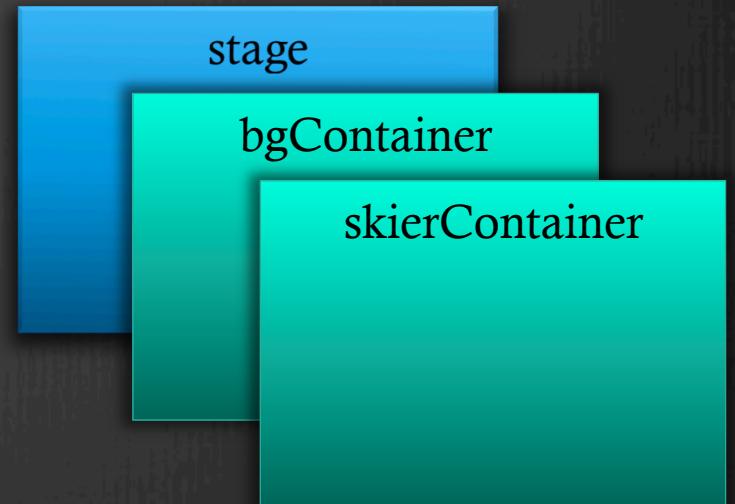
Lets look at code

Create a stage to draw on

```
canvasElement = document.getElementById(canvasElementId);
var stage = new Stage(canvasElement);
// allows touches to work
Touch.enable(stage);
```

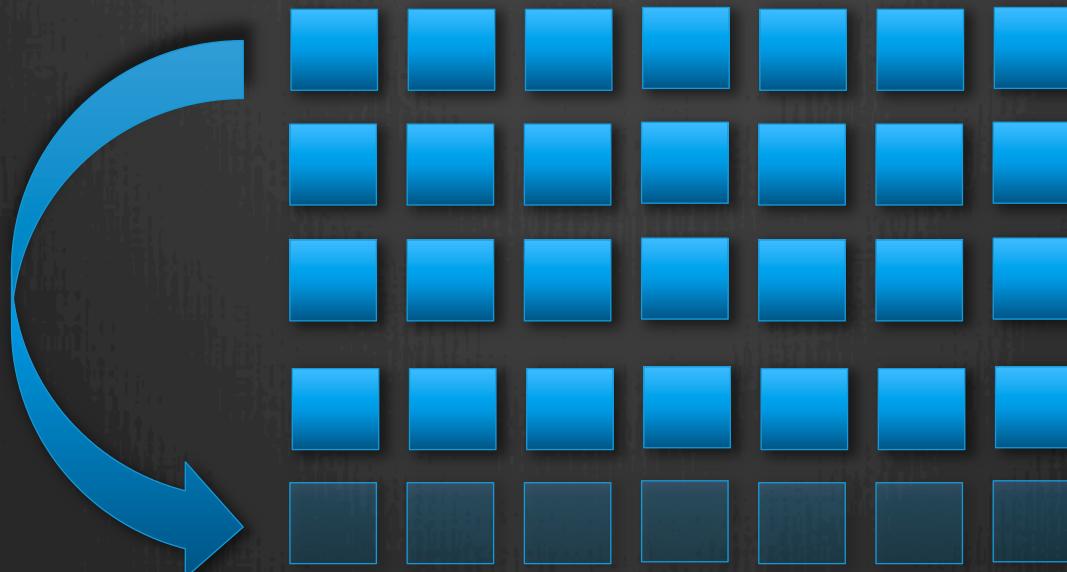
Add some containers

```
var bgContainer = new Container();
var skierContainer = new Container();
stage.addChild(bgContainer);
stage.addChild(skierContainer);
```



Layout some sprites

- Skier is stationary in the middle of the screen
- Rocks and Trees fly past
- World wraps around itself



Actually drawing something on screen

```
var skier = new Bitmap("images/person.png");
skier.regX = HALF_TILE_EDGE;
skier.regY = TILE_EDGE;
skier.x = (stageWidth * 0.5);
skier.y = (stageHeight * 0.5);
skierContainer.addChild(skier);
```

Start up the game loop!

```
Ticker.addListener(world);
Ticker.useRAF = true;
Ticker.setFPS(60);
```

Every 13-ish ms call world.tick()
.useRAF → use requestAnimationFrame

On every loop we do the following:

- Update the position of the rocks and trees
- Check for collisions
- Update the score

Collision Detection



- Simple detection using `.getObjectUnderPoint`
- Animate between Person and Crash sprites

```
Tween.get(skier).to({alpha: 0}, 200).set({visible: false});  
Tween.get(crash).set({visible: true}).to({alpha: 1}, 200);  
setTimeout(function() {  
    Tween.get(crash).to({alpha: 0}, 200).set({visible: false});  
    Tween.get(skier).set({visible: true}).to({alpha: 1}, 200);  
, 2300);
```

What's my score?

Add to container

```
var scoreDisplay = new Text();
scoreDisplay.textAlign = "right";
scoreDisplay.x = stageWidth - 10;
scoreDisplay.y = 24;
scoreDisplay.font = "bold 24px monospace";
skierContainer.addChild(scoreDisplay);
```

Simple to update

```
scoreDisplay.text = "1,000,000";
```

Touch/Mouse interaction

- stage.onMouseDown
- stage.onMouseMove
- stage.onMouseUp
- localToGlobal and globalToLocal to transform co-ordinates
- Next version is supposed to have gestures and multi-touch

To the <device>™!

- PhoneGap (aka. Apache Cordova)
- Command line tool to create hello world project
- Test on device
- Possible limitations
 - Game Center / Scoreboard
 - In-app purchase
- Documentation may not match release
- May need to tweak plists and xml files

All of the icons



cordova_16.png



cordova_24.png



cordova_32.png



cordova_48.png



cordova_64.png



cordova_128.png



cordova_256.png



cordova_512.png



cordova_android_36.png



cordova_android_48.png



cordova_android_72.png



cordova_android_96.png



cordova_bb_80.png



cordova_ios_57.png



cordova_ios_72.png



cordova_ios_114.png

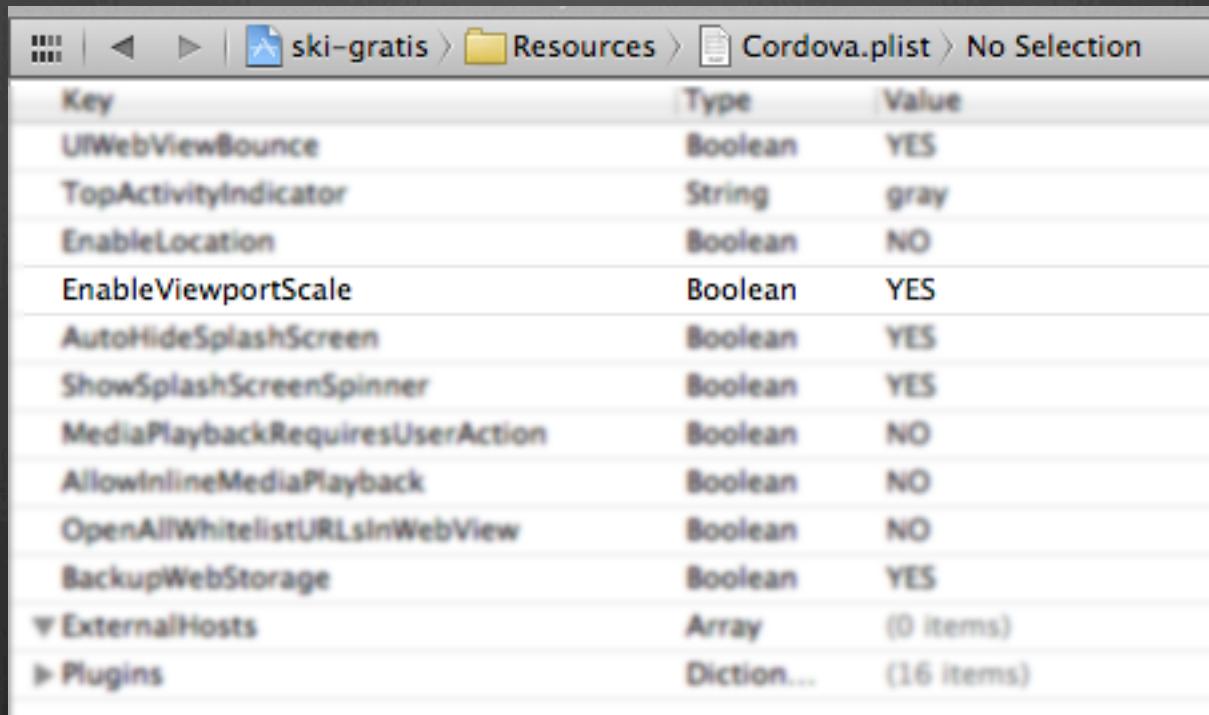


cordova_ios_144.png

And some splash screens



Spend many hours fixing layout



The screenshot shows the Xcode plist editor interface. The title bar reads "ski-gratis > Resources > Cordova.plist > No Selection". The main area is a table with three columns: "Key", "Type", and "Value". The table contains the following data:

Key	Type	Value
UIWebViewBounce	Boolean	YES
TopActivityIndicator	String	gray
EnableLocation	Boolean	NO
EnableViewportScale	Boolean	YES
AutoHideSplashScreen	Boolean	YES
ShowSplashScreenSpinner	Boolean	YES
MediaPlaybackRequiresUserAction	Boolean	NO
AllowInlineMediaPlayback	Boolean	NO
OpenAllWhitelistURLsInWebView	Boolean	NO
BackupWebStorage	Boolean	YES
ExternalHosts	Array	(0 items)
Plugins	Dictionary	(16 items)

Stick it on the App Store

(for free of course)

YOU'VE WON

\$0

All Source code over here:

<https://github.com/sugendran/ski-gratis/>