Interactive Story Studio (ISS)

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Outlines

- Introduction.
- What did we use?
- Story Builder Studio.
- The Loader.
- Actions, Features and Particles
- Coordinators.
- Story: Candy House.
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Introduction

An **interactive story** is one that allows kids to interact with all the elements shown on the screen and perform multiple actions on such elements.

Introduction

Our project was to design a platform that enables storytellers to build interactive stories that runs on iOS and android without any programming expertise.

Introduction

- In this project we followed a "content-driven" approach.

- Studio:
  - Design and build the story using a drag-and-drop approach.

Introduction

○ The Loader

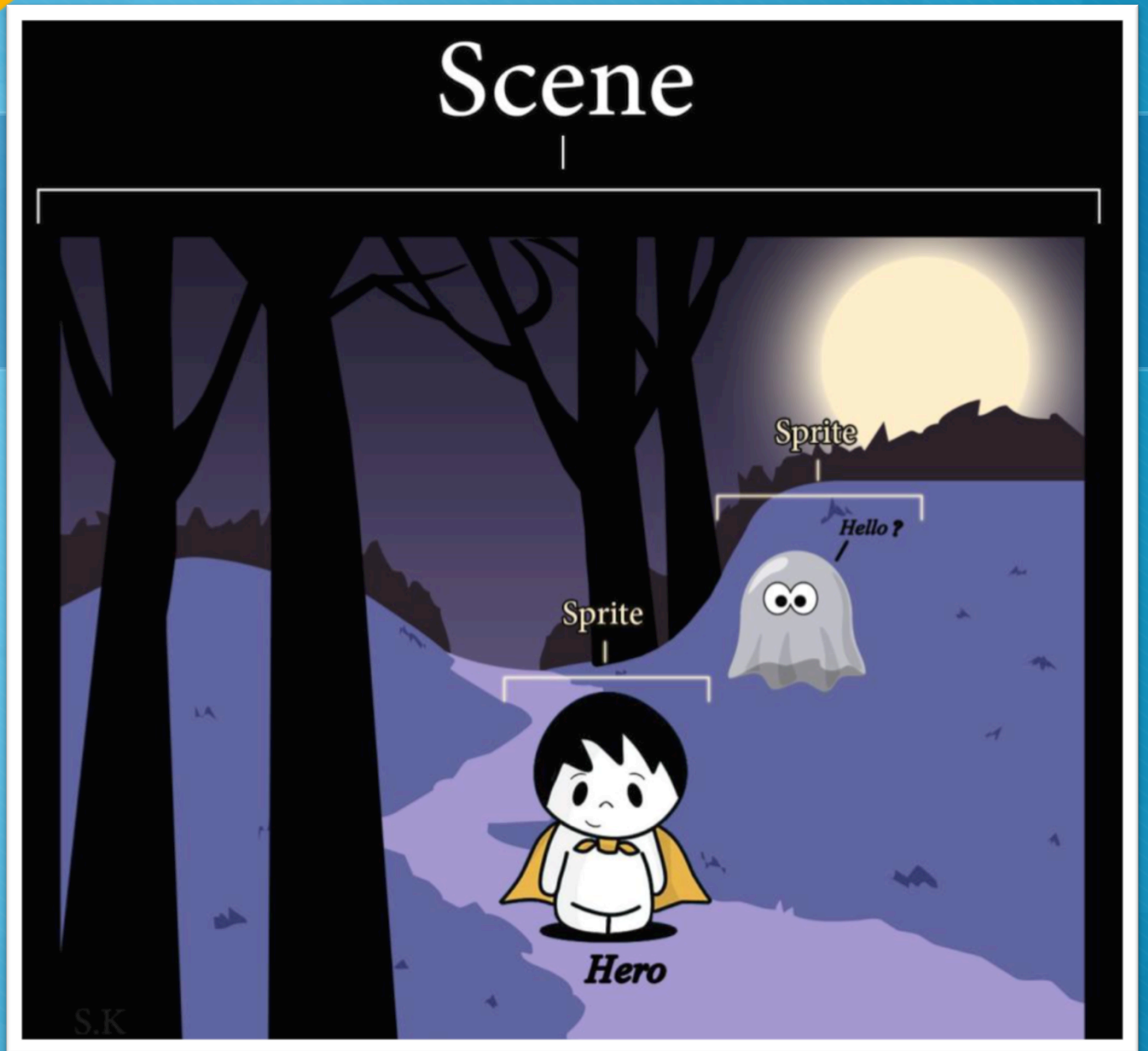 ○ Makes the story come alive on the mobile device.

What did we use?

- Java
- Objective C
- Cocos2D-Swift Version 3
- Physics Engine : Chipmunk
- Photoshop
- Audacity

Cocos2D

Scenes: Game Levels.

Sprites: Game Characters and Objects.

Story Builder Studio

○ It was implemented using JAVA language (Object Oriented).
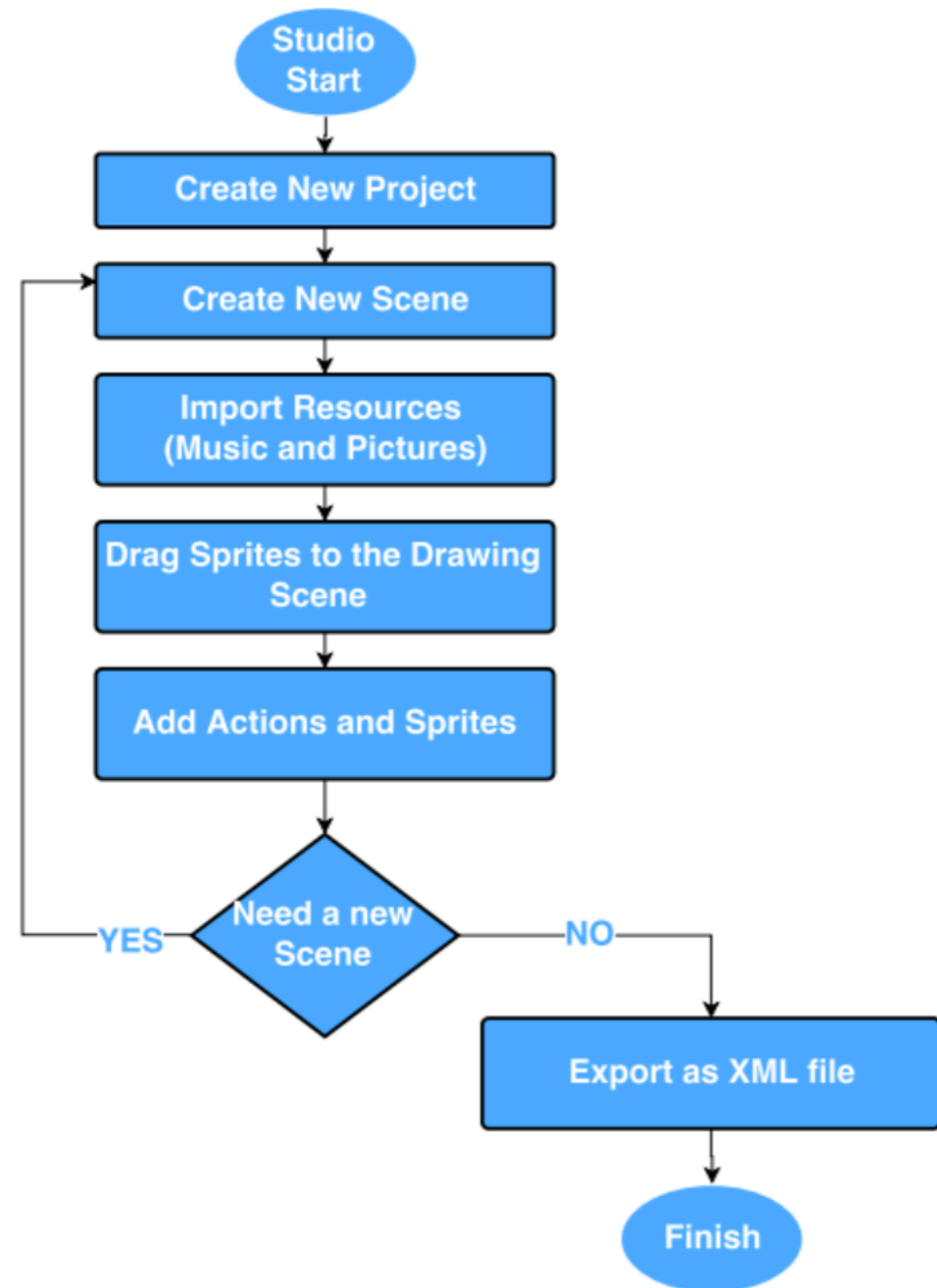
○ User-friendly and easy to work.

Story Builder Studio

SB

○ **Create Scenes and add characters, element and music.**

○ **Just import the resources.**

○ **Add Actions.**
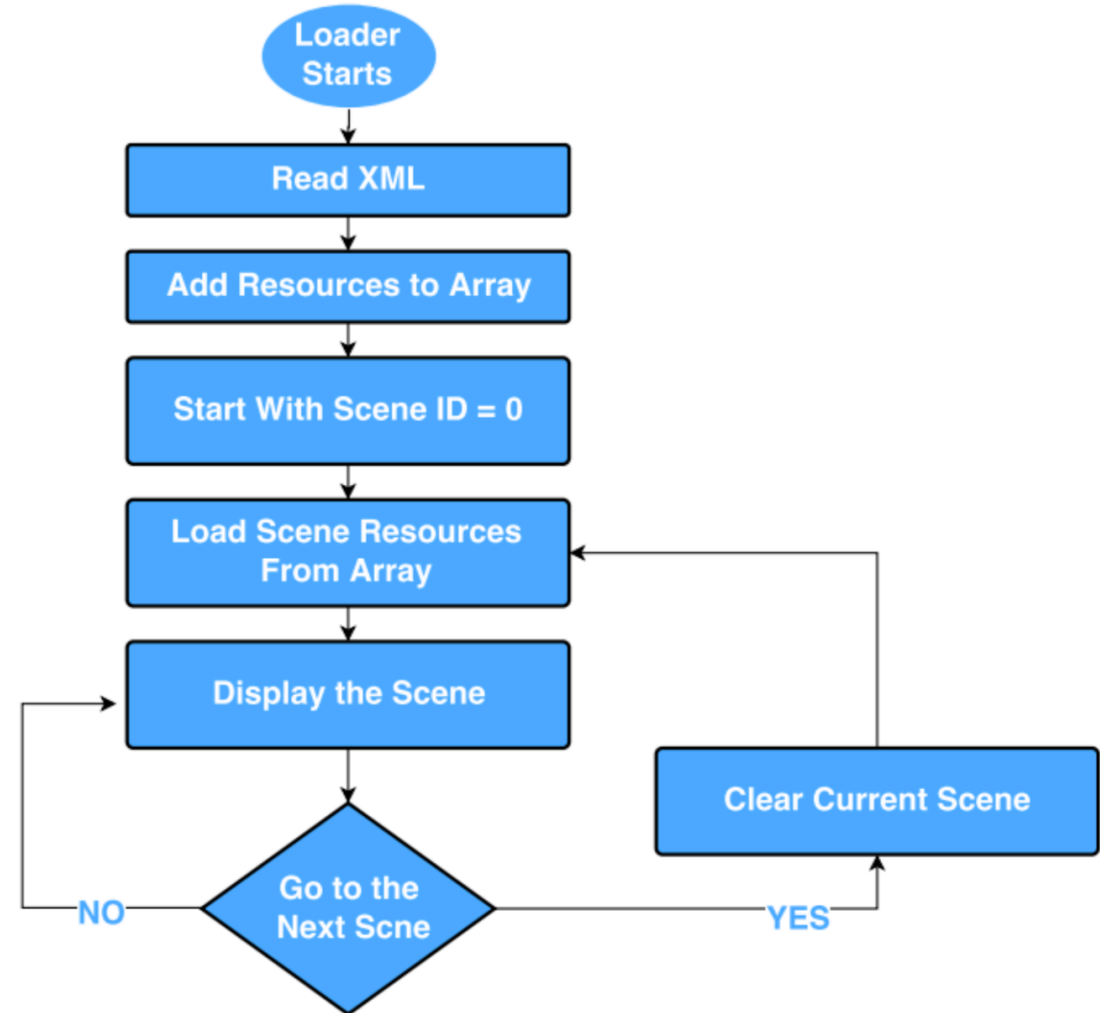
Studio Flow Chart

The Loader

- Written in Objective-C.
- Used Cocos2D-Swift framework.

The Loader

○ **Process:**

 ○ **Reads XML file.**

 ○ **Parse XML elements.**

 ○ **Loads them to an array.**

 ○ **Run The Story.**

Flowchart

Loader Starts

↓

Read XML

↓

Add Resources to Array

↓

Start With Scene ID = 0

↓

Load Scene Resources From Array

↓

Display the Scene

↓

Go to the Next Scne

NO (loops back to Display the Scene)

YES → **Clear Current Scene** → (loops back to Load Scene Resources From Array)

Actions

- Move and Jump.
- Fade In and Out.
- Scale and Rotate.
- Sound Effect.

Actions

- Animation Actions.
- Share On.
- Take Photo.
- Go To Scene.
- Motions: Accelerometer and Gyroscope.

When do Actions occur?

- On Enter.
- On Click.
- On Shake.
- On Blow.
- On Direction.
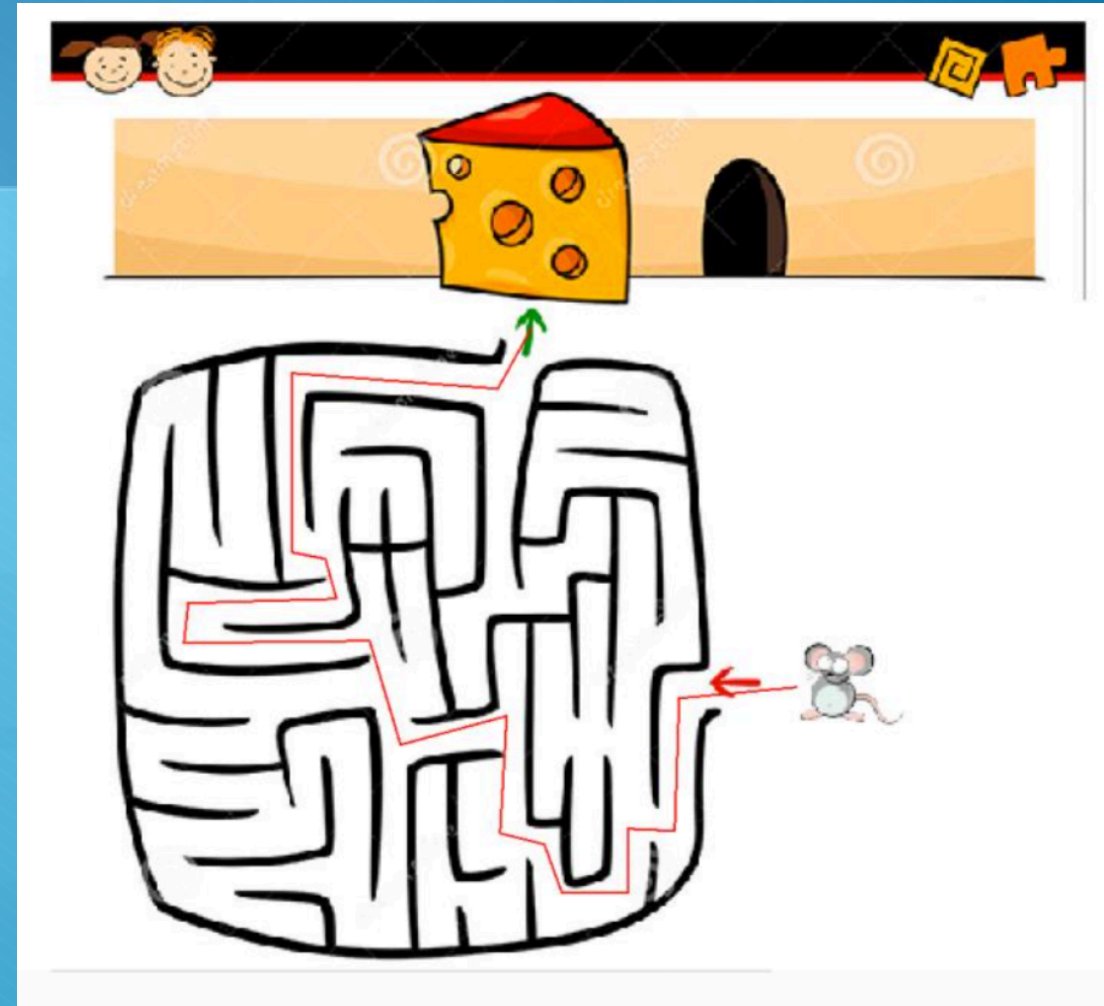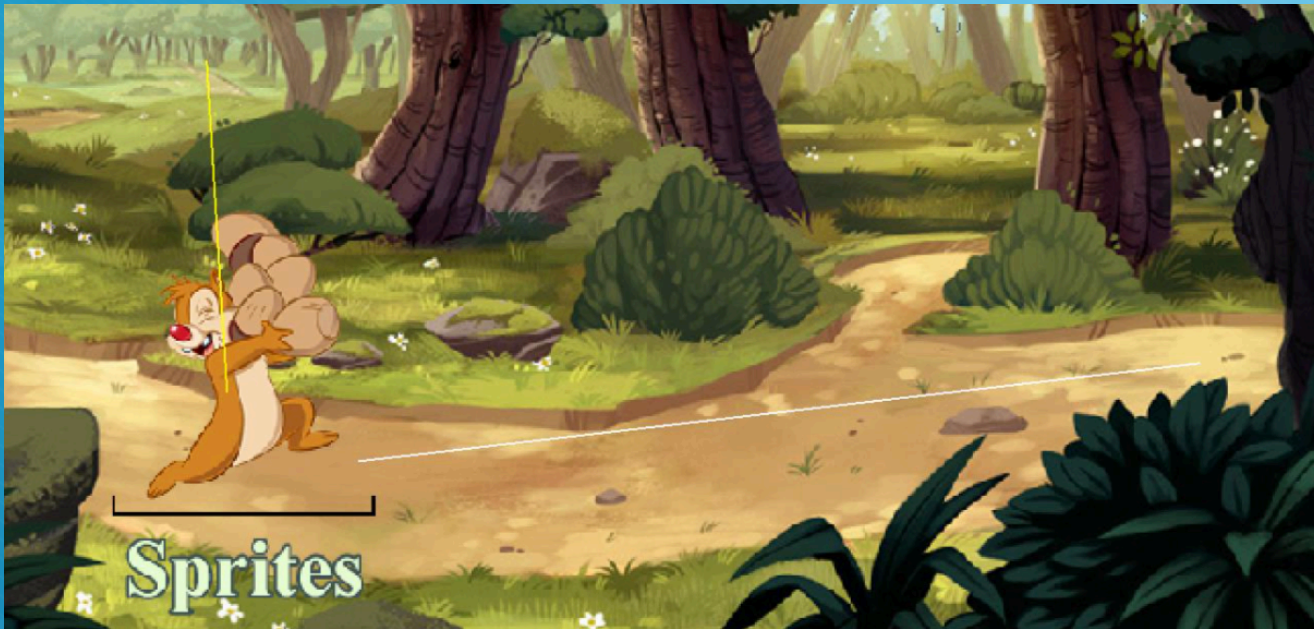
Group of Actions

- On Parallel.

- On Sequence.

Features

- Drag.
- Drop.
- Physics World.

Coordinators

- Paths

Sprites

Coordinators

- Area

Particles

Number of images, which work together to create a special effect like fire, rain, snow.

Constrains

- Time.
- Graphics.

Story

- Candy House –Hansel And Gretel-

- Application to test the platform.

- Language: Arabic.

- Number of Scenes: 19 (In Progress).

- Illustrated By: Abd el Rahman Najm el Din.

Demo Time

Conclusion and Future Work

- Achieve our goals in creating a helpful and profitable platform.

- Create a complete application in less than a week.

Conclusion and Future Work

- For future work:

  - Support more actions and features especially physics.
  - Support more frameworks like Sprite kit and coco2d-x.
  - Support more mobile platforms like Android.