Mục Lục

1. Giới thiệu chung
   1. Giới thiệu về Android, libGdx
   2. Demo Game Super Jumper
   3. Các kiến thức cơ bản về Framework (life cycle, starter class)
2. Project Setup, Running, Debuging
   1. Project Setup
   2. Giải thích structure của Game (assets, code...)
   3. Các lớp cơ bản:

Camera, OrthorgraphicCamera, SpriteBatch, Texture, TextureRegions, and Sprite

1. Game 2D core

Sprite, SpriteBatch, TextureAtlas(Texture Packer), BitmapFont (Hiero), NinePath...

1. Game 2D effect

Animation, Tween, Particle Effect (Particle Editor)

1. Các vấn đề khác:
2. Audio, threading, interfacing Platform-specify code, File Handling, Preference
3. AssetManager

TextureAtlas, audio, bitmapfont

1. InputHanling (2 bài)

Touch, key typed, gesture, Acceleration, vibration, compass, back, menu catching

1. InputHandling (P2)
2. Scene2D (P1): camera, image, imagebutton
3. Scene2D (P2): ui
4. MyFrame – xây dựng framework (P1)
5. MyFrame(P2)
6. Tictactoe Game (P1)
7. Tictactoe Game (P2)
8. Physic Box 2D (P2)
9. Title Map
10. Online Game (NIO, MINA, Database, JSON, HttpClient)
11. Giới thiệu về 3D
12. Giới thiệu về Android, libGDX
    1. Giới thiệu chung
    2. Project Setup
    3. Demo
13. Framework Application
    1. Life Cycle
    2. Starter class:
       1. Desktop
       2. Android
       3. HTML5
    3. Lớp Gdx.app
       1. getApplicationType()
       2. log(String tag, String msg)
       3. error()
       4. debug()
       5. setLogLevel(logLevel)
          1. LOG\_NONE
          2. LOG\_DEBUG
          3. LOG\_ERROR
          4. LOG\_ÌNFO
14. Threading:
    1. Android, Desktop: Gdx.app.postRunnable(Runnable run)
    2. HTML5: Single Thread (Impossible)
15. Intefacing with Platform-specify code
16. Simple Game:
    1. Project Setup
    2. Asset
    3. Configure
    4. Code
       1. Loading Asset
       2. Camera & Sprite Batch
       3. Render
       4. Cleanging up: Dispose
       5. Handling pause, resume
17. File handling
    1. Type:
       1. Class Path
       2. Internal
       3. Local
       4. External
       5. Absolute

Ex : FileHandle handle = Gdx.files.internal(“ass.png”);

* 1. Method:
     1. exists()
     2. isDirectory()
     3. readString(), readBytes()
     4. writeString(), writeBytes()
     5. copyTo(FileHandle)
     6. rename()
     7. moveTo
     8. delete

1. Preference:

Preference prefs = Gdx.app.getPreference(“my preference”);

prefs.putString(“name”, “Donal Duck”);

prefs.getString(“name, “No name stored”);

1. Input Handling:
   1. Dissable, enalbe Acelerometter, Compass

Config.use Acelerometter = false;

* 1. Querre Available

Gdx.input.isPeripheralAvailable(Peripheral.HardwareKeyboard)

* 1. Mouse touch:
     1. Polling:
        1. Gdx.input.isKeyPress(Key.A)
        2. Gdx.input.justTouch();
     2. Event Handling: Observer Pattern
        1. Implement InputProcessor()

keyDown, keyUp, keyTyped

touchDown, touchUp, touchDragged, touchMove, scroll

Gdx.input.setInputProcessor(input)

* + - 1. InputMuliplexer: UI input, Game World input

Ex:

multi.addProcessor(new Uiinput())

multi.addProcessor(new GameInput())

Gdx.app.setInputProcessor(multi)

* + - 1. Gesture Detection:
      2. Simple Text Input:

Gdx.input.getTextInput(TextInputListener, “Dialog Title”, “intialText Fild Vaue”)

* + - 1. Acceleration:

Gdx.input.getAcellerationX()

* + - 1. Compass
      2. Vibration
      3. Back & Menu Catching:
         1. Gdx.input.setCatchBackKey(true)
         2. Gdx.input.setCatchMenuKey(true)
      4. OnScreen KeyBoard:
         1. Gdx.input.setOnScreenKeyboardVisiblity(true)

1. 2D:
   1. SpriteBatch, TextureRegions, and Sprite
   2. Orthorgraphic Camera
   3. NinePathces
   4. BitmapFont
   5. TextureAtlas
   6. Pixmaps: offline, runtime
   7. Particle Effect
   8. Tween
   9. animation
2. Tool: Texture Packer, Hiero, Particle Editor
3. AssetManager:
4. Audio: music, sound
5. Graphic: clear screen
6. Scene 2D:
   1. Scene2d.ui
   2. skin
7. Title Map
8. Physics Box 2D
9. myFrame

Demo First

* + - 1. Setup
      2. Giải thích code: