CSC404: Mobile Game Design

Course topics include: game history & genres, "ludology" (theory of fun, story creation, optimal experience), character & level design, industry tools & processes, graphics & animation, collision detection, visual effects, scripting (passive & active), HCI & interface design, playtesting, business of gaming. Material & projects based on real-world processes.

Instructor Information

Name	Email
Elias Adum	elias.adum@utoronto.ca (put "CSC404" in subject)

Class Information

- **Lecture:**   Thursday 10:00 AM – 12:00 PM   (LM 123)
- **Tutorial:**   Tuesday 10:00 AM – 11:00 AM   (LM 123)
- **Office hours:**   Tuesday 11:00 AM – 12:00 PM or by appointment   (BA 3219)

Course Materials

- **Web Page:**   http://www.teach.cs.utoronto.ca/~csc404h/fall/
- **TA Contact:**   gibson@dgp.toronto.edu
- **Engine:**   Any are allowed; recommended engine is: Unity.
    Past engines have included Panda3D, Ogre, Torque, XNA, Irrlicht, Unreal.

Course Schedule

Week of	Topics	Milestone(s)
Sep 12	Course Intro & Game Design Tools	**Game Jam Assignment**
Sep 19	Ludology	
Sep 26	Pitching Games	Milestone 1: **Pitch**
Oct 03	Design Docs, Game Mechanics, Character & Level Design	
Oct 10	Prototyping	Milestone 2: **Design Doc & Prototype**
Oct 17	UI/UX Design, Game Programming Patterns	
Oct 24	Project Management & Scrum Development	Milestone 3: **Alpha**
Oct 31	Playtesting & Graphics for Games	
Nov 07	AI For Games	
Nov 14	Balancing Game Designs	Milestone 4: **Beta**
Nov 21	Business of Games	
Nov 28	Publishing and Next Steps	Milestone 5: **Final Presentation** (Also: Game & peer evaluations)
Dec 05	Wrap-up and Playtesting Results	

- **Assignment** – 5%
- **Participation** – 10%
- **Course Project** – 85%

Assignment: Creation of basic game: sprites, items, heads-up display (beyond tutorial level!), splash screen, HUD updates, character behaviours (appearance, standing & movement, interaction with items).

Note: *For each of the following, you are expected to critique other groups when you are not presenting.*

Milestone #1:   Game Pitch (10%)   Due: Sep 29th
- Present two game design ideas that target the theme and the audience.
- Describe gameplay, secret ingredients, max and min completeness levels for final product.
- Must display a thorough understanding of how the game will play.
- **Submit:** Creative brief document

Milestone #2:   Design Specifications and Prototype (15%)   Due: Oct 13th
- Present all pre-coding design details of the final game.
- Include: mock-ups, storyboards, mood boards, sketches, data models, task breakdown, etc.
- Presentation should include game walkthrough and a technology proof-of-concept.
- **Submit:** Design document
- **Submit:** Prototype

Milestone #3:   Game Alpha (15%)   Due: Oct 27th
- In-class demo of prototype (minimum target from Milestone 1).
- Describe goals of final sprints, and target for final product.

Milestone #4:   Beta Release (20%)   Due: Nov 17th
- In-class demo of completed product, and playtesting results.
- Outline challenges and features of final design, describe finishing touches.
- Produce tutorial, with descriptions of gameplay and controls.

Milestone #5:   Playtesting Demo & Final Items (25%)   Due: Dec 1st
- Testing & evaluation by industry professionals
- Final reflections on development process and final product.
- **Submit:** Final game
- **Submit:** Peer evaluation