Games Development

Lecture 0
– About this module

Module Overview

What's the big idea?

- Learn (and demonstrate knowledge of) the PROCESS of developing games in teams

Why is this important?

- Working in teams is part of the real world
- Core skills in computing:
  - Meetings
  - Project planning
  - Testing
  - Documentations
  - COMMUNICATION
  - Deadlines – and delivering SOMETHING WORKING for deadline

Games   Development

This doesn't matter too much!

This is the important bit

Good process will lead to good product ….

Assessment: 100% CA

- 25% weekly teamworking
  - (participate at Friday meetings & online via BaseCamp)
- 25% week 6 open book lab test
  - (sample test will be available in week 4 – hassle me for this)
- 10% game design and test plan
- 10% alpha release
- 10% beta release
- 10% final release
- 10% demo and defense

- Deadlines will be as in the schedule from Markus for year 4
  - Late work gets zero unless there is a medical cert
  - Deadlines are 13:00 Friday that week unless otherwise states

1 team project

- Create an interesting and technically challenging game
  - Can be entertainment
  - Can be serious game – eLearning
  - Could even be a productivity app using game technologies
  - Week 1 is to brainstorm and make a decision on WHAT
- EVERY student must demonstrate:
  - Demonstrate use of Git DVCS (Github or Bitbucket)
  - Teamworking (Friday meetings & online with Basecamp)
  - Code documentation skills (e.g. Doxygen)
  - SIGNIFICANT contribution of code to project (e.g. 1 level per student)
- PLUS each student will take on at least 1 team 'role'

Each team MUST have the following 4 roles

- (1) Rapporteur (+ needs a second role)
  - Ensure every meeting has minutes and team members have weekly todo lists with deadlines
  - Chase team members if meetings or deadlines missed
  - Create drafts of team presentation materials
- (2) Guardian of the code (+ needs a second role)
  - Accept 'pull' requests into MASTER branch
  - Be the team 'Git' expert – drive the Git flow the team adopts
- (3) Tester
  - Unit test writer + integration tests
  - Ideally investigate Travis CI and Unity Cloud
- (4) web API developer
  - User profiles/trade goods etc.

Additional team roles

- () level design tool creator
  - Could be data-driven and/or interactive
- () networker
  - Multiplayer modes (note – you need access to 2 machines for this)
- () App developer
  - publish to Androind and iOS apps
- () software architect
  - esp. use of design patterns
  - Refactoring recommendations to team members etc.

- And / or others – you can negotiate with me in week 1/2

Basecamp – team weekly minimums

- weekly meeting minutes
- weekly member todo lists
- draft documents for discussion
  - (e.g. test plan / game design)
- Updated
 - Game Design Document
  - Software road map

Deliverables

- (1) game design + test plan + feature list + software roadmap

- (2) alpha release - roadmap should state contents and features of each release
- (3) beta release - roadmap should state contents and features of each release
- (4) final release - roadmap should state contents and features of each release
- NOTE: Releases include unit/integration tests + code doc

- (5) demo - PPTs for 10 minute presentation by team

Required Textbook

- **Unity 5.x Cookbook (Sep 2015)**
  - Matt Smith & Chico Queiroz
  - Published by: Packt
  - ISBN: 978-1784391362
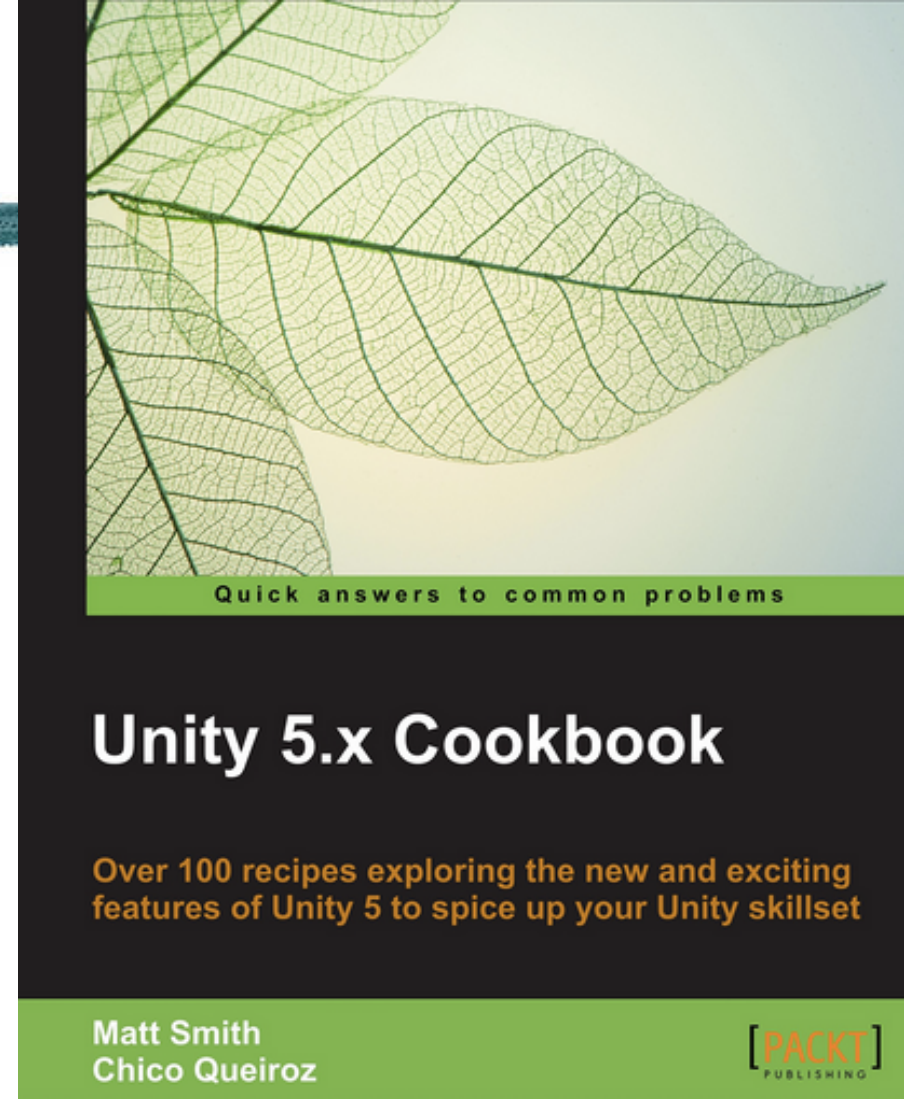
- Since publisher/editors are rubbish I will post up PDFs of book onto Moodle – so you get it for free
- Just don't talk to me about editors ….