Today

- Testing Lecture
- Riot Testing Lecture
- Break!
- In Class Work: FOCUS TEST
  - Plan Test
  - Run Test
  - Report Results

Testing.
Everyone needs it. How come nobody likes it?

Quality Assurance

- “any systematic process of checking to see whether a product or service being developed is meeting specified requirements”

in other words…

- **Making sure your game does what you want it to do, and does it well.**

who?

Types of Testing

- Technical Testing.
  - Looking for defects.
- Playtesting:
  - You play your game!
- User testing – someone else plays your game
  - Focus Testing
  - User Testing

Technical Testing Basics

- Technical Standards (Have them.)
- Bug database
- Build and test before check in
- Daily builds, daily play throughs
- Planned feature cuts
- Code Freezes (Code Reviews)
- Asset Freezes

Advanced Technical Testing

- Maintain ‘working’ feature lists
- Agree how features should work
- Test newly implemented features as soon as they are ‘done’.
- Checklist testing: methodical testing of all implemented features, all branches, all possible states. (Regression testing – testing features that haven’t changed since last checkin to make sure they are still working)
- *Remember that checklist testing – and strict feature checking- doesn’t cover freeform play: getting in the game and just ‘doing stuff’ to see what happens. Test that too!*

Be Kind To Your Fellow Engineers

Write good bugs, not bad.

- Good bugs include: *What happened. What should have happened. How to reproduce. How common & serious the bug is. Supporting data, like screenshots, or numbers, is useful.*
- Know the difference between a criticism and a critique.
- Read “Bugs & Bug Reporting” for more details.

Why: User Testing

- Engaging game play is hard: Find out how users react to your game.
- Gauging overall game difficulty/challenge.
- Test driven design – needs testing!
- Check your User Interface against actual users.

Test driven design does not mean ‘do what your testers tell you to!’

How: User testing

- Remember the ‘Experimental Method’? *Form a hypothesis, create a test for it, gather data, analyze results.*
  - *This isn’t really that different!*
- Have a Question (or a Goal) for each focus test!
- Develop a method: Standardize your approach.
  - Introductory Script
  - List of observations to look for
  - Set of questions to ask your testers
- Review your data, and decide what your team should do about it!

tl;dr

- For each test you run:
- Who are you testing with?
- What are you testing with?
- Why are you testing?

Data Collection

- Direct Observation
  - Ask players to talk out loud about what they are doing.
  - Take notes!
- Surveys
  - Not real time; people forget what they were doing quickly.
- Interviews
  - People don’t like to disappoint you, so they often soft pedal their comments.

Examples

- Observer script/survey
- Focus Test Form

Focus Test Workshop

- Prepare for test (15 minutes)
  - Decide on a question, data collection method(s),
  - create any useful paperwork
- Run Testing (60 minutes)
  - Everyone on your team should get a chance to observe at least one tester, and everyone on your team should play AT LEAST 2 games.
- Post test discussion (15) followed by quick report to the class on your results: what did you learn, how did it go?