Individual Software Project

The pre-production process

By Ben Thompson

The Idea… The how? The what and where it came from.

According to Steve Jobs, the essence of creativity is to make a connection between (sometimes) two unrelated items. Wired Magazine in 1995: "Creativity is just connecting things. "

Big picture thinking vs detail oriented thinking, pop psychology. (nonsense?)
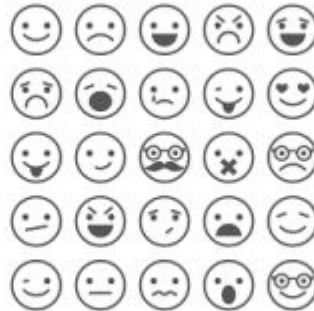
The Formulae (Love + Hate + Flow = Game)

Emotional Requirements:

• Player (Love of Stormtroopers)

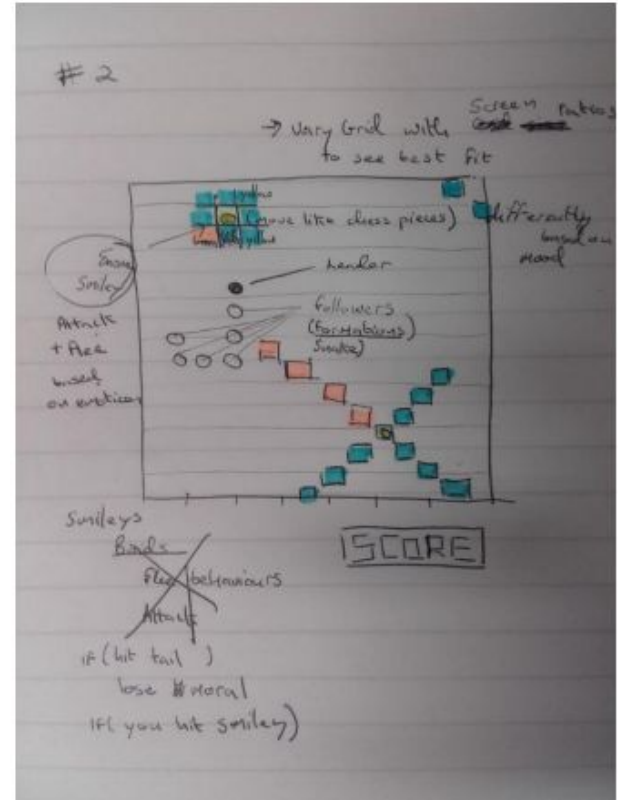• Enemies (Hatred of emoticons)

Love

Hate

Flow

The Design

Paper prototype:

• Grid environment wrap around

• Fixed update across board

• Hitting emoticons and annoying them, change in emotion and movement.

 • Score surviving rounds beating smiles and turning them into followers.

 • Instead of losing lives lose moral then followers (traitors)

The Agile methodologies

- Iterative and incremental process
- Divides the process into sprints
- Documentation
- Test driven development process (Unit testing)
- User feedback (should be received weekly)
- Advantages vs Disadvantages from personal experience
- Unique requirements for mobile development given fast changing nature of the environment. See cited paper. States agile methodologies are suitable for mobile development.

Design patterns for game development

High cohesion and low coupling environment

Avoid God objects

- Model-View-Controller

The models
- The player
- An wrap around grid
- Enemies

The controllers
- The main loop and the input handler
- Controller to process player input

The views
- The world renderer – to render the objects onto the screen

- The State pattern

Should be used for the transition of states of the enemy smileys.

- The Strategy pattern

Another method of object composition used to allow for reusable code for designing enemies.

Sample Schedule

Week 1	Research,idea formation and learning new technologies(pre-production process)
Week 2	" "
Week 3	" "
Week 4	Presentation on pre-production process and showing commitment to idea
Week 5	Building class diagram and implementing Singleton pattern for game class creating wrap around grid, Model view controller layout, score system class
Week 6	Leader and follower movement
Week 7	Enemy classes strategy and state pattern implemented
Week 8	Working on collision and connecting to score system
Week9	Presentation of work so far
Week 10	Apply finishing touches
Week 11	User testing and minor improvements
Week 12	Final presentation

Questions

References

- Designing an agile methodology for mobile software development: A hybrid method engineering approach ,IEEE Computer Vahid Rahimian Raman Ramsin 2008

- "What is Agile Software Development?". Agile Alliance. 8 June 2013.