Exploring CS

Software engineering project, elevator pitches

Software Design Project Goals

- Learn useful business skills: elevator pitch, writing proposals, iterating on a design

- Learn to budget your time: lots of freedom with milestones

- Create something cool: I'll get my industry friends to award prizes

- Focus on your interests: design, art, storytelling, programming, cooking, reading…

Requirements

- Game/animation must be educational

- At least 3 scenes (different backgrounds and interactions including start/end)

- At least 4 sprites

- Interaction (clicking, answering questions, moving characters around)

- Complex logic (keeping score, checking multiple conditions)

Milestones

- Elevator pitch

- Proposal

- Storyboard

- Finished product

Principles

- Build something you want to show off

- Find creative ways to collaborate

  - Within group -- design sprites on different computers

  - Between groups -- multiple levels of one game

- Being idle or off task is really bad

  - A large part of your grade will be based on how you use your time

  - Find something that interests you to do

Grading

- Full rubric is online

- A lot of points for turning things in

- Looking for detail

- Challenge yourself -- if English is your second language, work hard on proposal

- Talk to me!!

Elevator Pitches

- Overview of project idea

- 30 seconds or 100-150 words

- Generally used by venture capitalists

- Good skill for entrepreneurs, project managers, salespeople, evangelists, policy-makers, job seekers, speed daters!

(Wikipedia)

Elevator Pitch Elements

- What the project is

- What benefits it offers

- Why you are going to be successful

Brainstorming

- Animation describing a place, historical event, book plot that asks user questions

- A series of puzzles

- Tutorial for cooking something, fixing a car, software, using Scratch

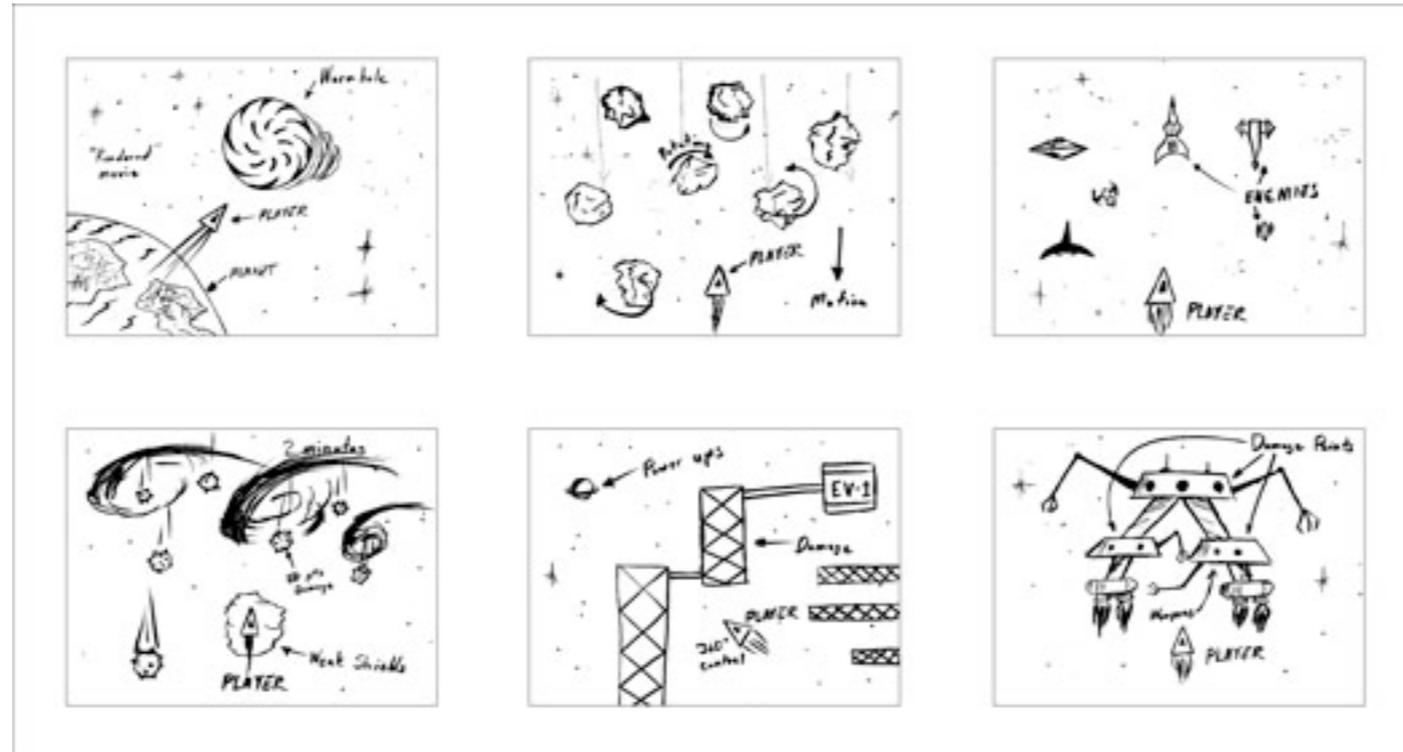- Arcade game with multiplication questions

Today

- Partner or alone?

- Brainstorm project ideas

- Come up with a preliminary elevator pitch

- Give it to at least 5 others

- Start storyboarding and writing the proposal

Storyboard

- Graphical organizer

- Forces you to make ideas concrete

- Used in animation, film, TV, games...

- Storyboard a PowerPoint presentation

- Storyboard software to get interaction right

Storyboarding Games

Proposal/specification

- Practice technical writing

- Get ideas down on paper BEFORE building

- Useful business skill