## Brainstorming

## Type:

- Puzzle games (puzzle optimization)
- RPG / Turn-based
- Virtual map

Background music: Fireflies (Ryan Farish)

# **Monument Valley**

PVG

### General Features:

- Scores
- Multiplayers
- Movement
- 2 player game
- BGM
- Sharing episodes (save)
- Accounts / Profiles
- Rankings
- Contain Randomness
- Interactivity
- Collect weapons / coins
- Smooth transitions
- Arresting plots
- Save / Load

### Todo:

- Revisit Old Games

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# Specifics:

- Slide on different direction to make different moves

- Draw shapes to create weapon
- Put Mac campus map as background
- Can have different levels of "buildings"

#### About UX:

- Time Effect

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#### Resources:

- AXURE (for designing UX)
- Unity (to design characters)

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- 1. One concept: (walk around the map?)
- 2. Implement game mechanic: not "shape of the map" is drive with the arrow keys + can't pass thru building; Drop off a passenger can pick another; could not pass thru obstacles
  - Important: Core rules of the game
  - Eg: MV: parts are connected; tap & rotate the change the viable paths
  - THis is more important than arts & extra features

Look at the game - figure out the mechanic you can implement it -> ~80% of the semester

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Monday: short presentation with written document

- Goal
- Audience
- Risks
- Sketch: 1st week; 2nd week; 3 weeks of blabla

Plan to have the app done by Apr. 1st

Framework for tile-based 2D games: unity (C-based), libgdx (java-based) (have a tile building map)

Recommended: Scavenger Hunt (with a simple, simple version)

What will it look like

Next Week: research options - find a tutorial and get it running (one - libgdx; one - unity); see what you like

Maps: Google Earth

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#### Feb. 10th

Git: look at what you commit before committing

Setup .gitignore

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#### Feb. 13th

Pair Programming: "4 eyes, 1 keyboard"

Comment: should be added when it is not obvious from the code

Code Smell: Scope of the variable >> the part it is meaningful (do not use global variables!)

Draw Figures: Piskel

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### Feb. 15th

render() method is running recursively - 打开 for loop structure Make things private - detect things needed to be concerned Separation of concerns

Be careful to deal with situations when anything might be null

#### Feb. 17th

If don't know what a line does - commented it out and see what happens Pay attention to warnings - but using human judgment to change it Create a GameConstant class (public static final)

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#### Feb. 22th

### Check-in

- Project on Github
- Pull, push, and run code?
- Everyone on team doing goal-focused work

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#### Feb. 24th

- Trade-off between replicate of code & working code
- Refactor -> rename (be careful! Name the whole file.)
- Harold in Cafe Mac -> ask for enemy moves

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#### Mar. 6th

- Demo Tips: Timeline: milestones, not features
- Don't apologize

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### Apr. 5th

Use **git stash** when you want to record the current state of the working directory and the index, but want to go back to a clean working directory. The command saves your local modifications away and reverts the working directory to match the HEAD commit.

#### Task

- Small
- Definite endpoint
  - Success criterion (margins?)
  - Time box (2 days research on X)
- Name

### Libgdx

- Download: <a href="https://libgdx.badlogicgames.com/download.html">https://libgdx.badlogicgames.com/download.html</a>
- Tutorial: <a href="http://www.gamefromscratch.com/page/LibGDX-Tutorial-series.aspx">http://www.gamefromscratch.com/page/LibGDX-Tutorial-series.aspx</a>
- Android SDK: https://developer.android.com/studio/index.html
- Android SDK Installation: http://www.androidauthority.com/how-to-install-android-sdk-software-development-kit-21 137/

Unity

- Find tutorial for Unity (Shuni)
- Find tutorial for Libgdx (Zhaoqi)
  - Find an example and see the code (how they do it?)
  - Build sth. relevant
- Build a map: start with tile map
- Look at Google API (Qisheng) (Probably won't help)

#### Github

Repository: <a href="https://github.com/Shunili/liegroup">https://github.com/Shunili/liegroup</a>

## Next Stage:

- Draw the map / how to make tileset (Photoshop) (how to cut the Figure into tileset -Tiled可直接切)
- Follow the tutorial
- Differentiate layer -> getLayers()
  - Don't start building the map until we have a game design
  - Logic-based clues? Social clues?

### Suggestions:

- Design how the game works
- Think about Pokemon Go what's interesting?
- Come up with cool ideas ignore the feasibility
- Come up with the strong game ideas

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剧情:开始:有入侵者+排除炸弹/挖一个什么东西?

- Scavenger Hunt背景 每到一个地方有题 -> 线索 -> 下一题
- 校园里randomly generate怪物,走在路上需要打
- 在某处开始有时间限制:"踏入机关"

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### Libgdx Tutorial Notes:

- Texture: pixels in memory

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- use transformation matrix to transform between coordinate systems

#### Midterm Demo:

- tech
- steps to be done for MVP
- updated timeline

### After Spring Break:

- Question types: multiple choice?