



Careers in Video Game Development

Ellen Beeman



Who am I?

Ellen Beeman

20+ year video game designer/producer

50+ game projects

Some of the companies I've worked with: Microsoft, Disney, Warner, Marvel, etc.





I co-teach “sophomore game projects class”

This class is the first time that art, design, programming, and sound design students are working together

These are two semester projects

I primarily work with the design and programming students



What goes into a video game?

Answer: a lot of hard work!

- Art
- Game design
- Programming
- Sound design
- Testing

Game Art

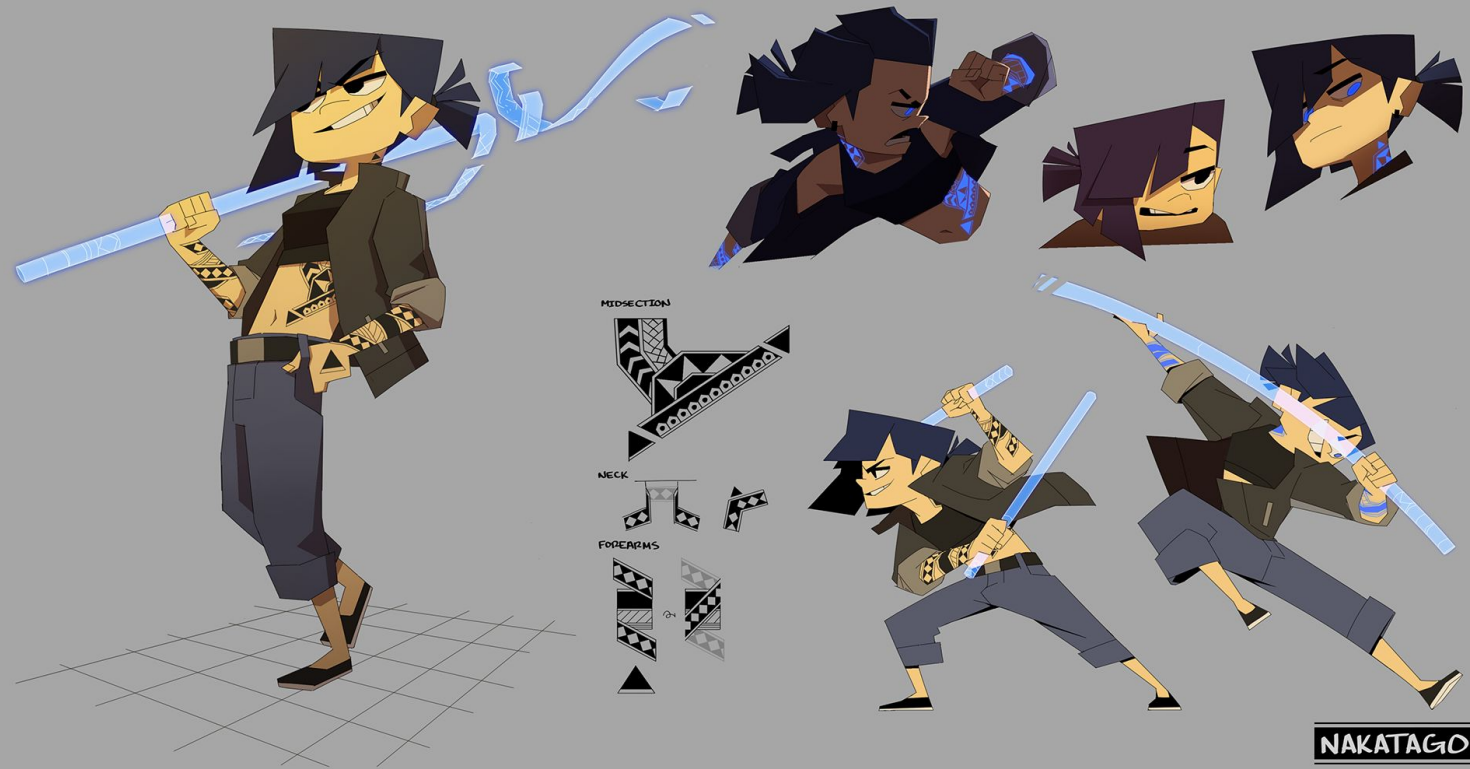
The art creation process for video games is very similar to what's used in film and television

- Character Design
- Character Modeling
- Animation
- Environments and props
- Visual effects

RAY

[EMMELIN PAYNELL HIQUIANA]

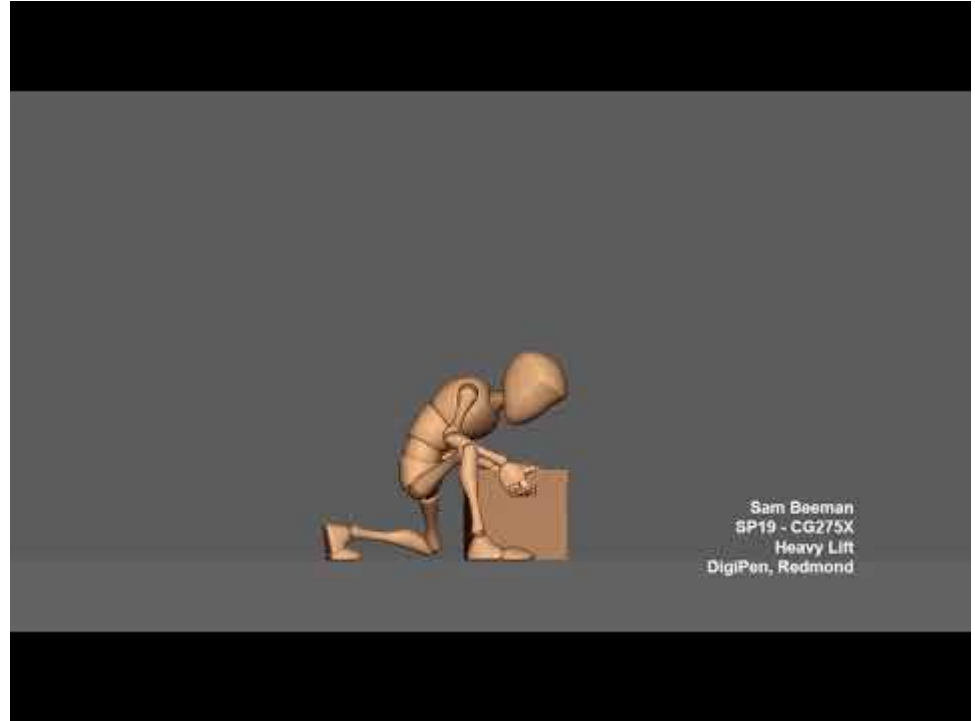
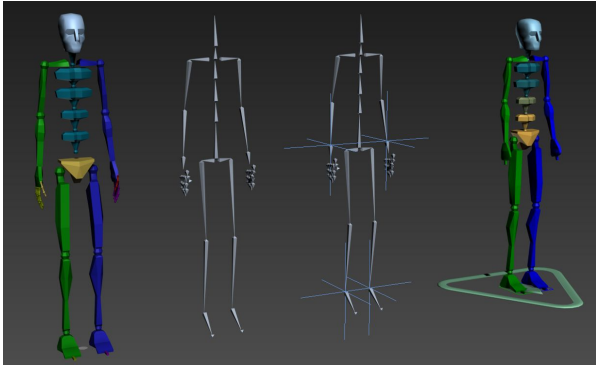
AD TAEZA



Art by AD Taeza, DigiPen BFA student



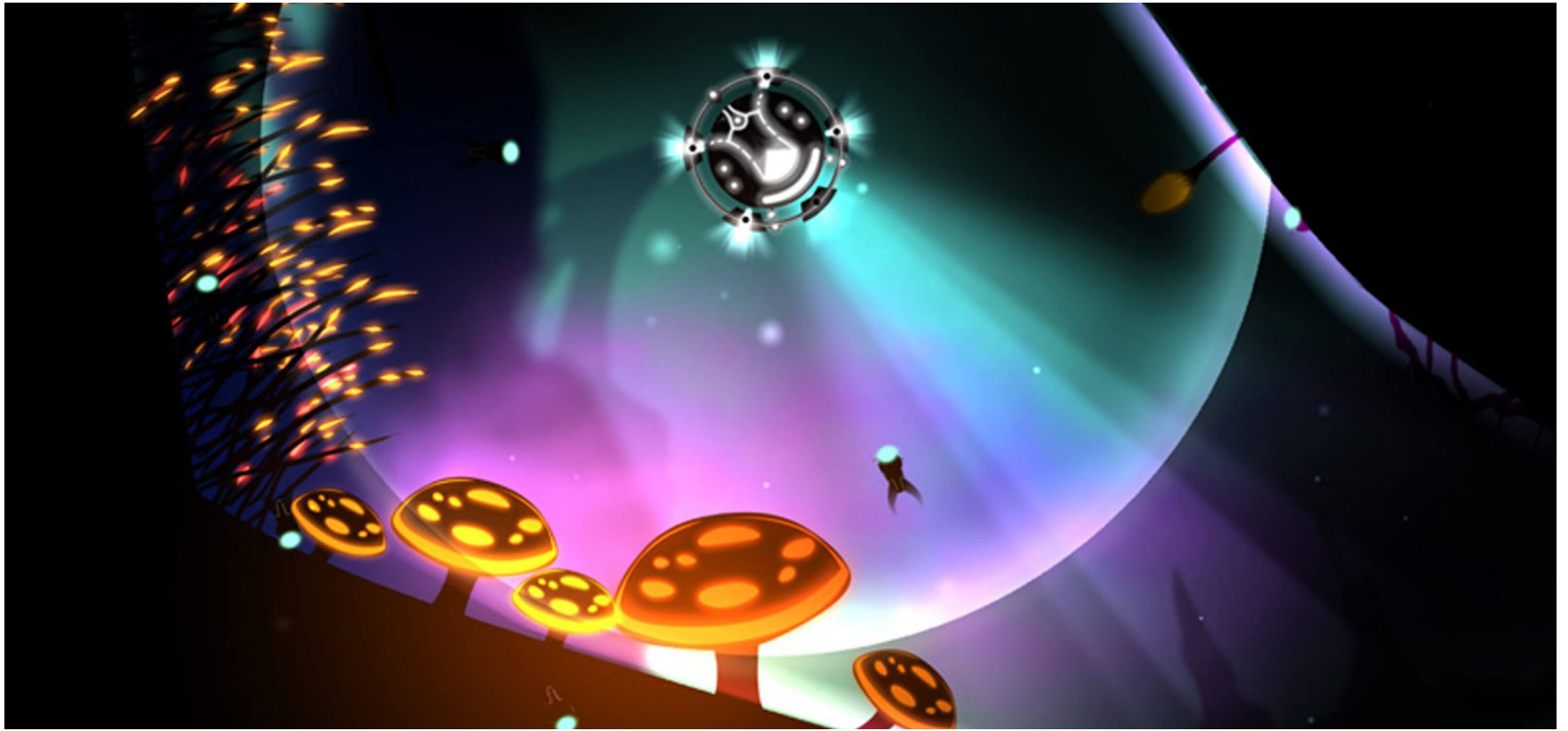
Art by Megan Smith, DigiPen MFA student



Animation by Sam Beeman, DigiPen BFA student



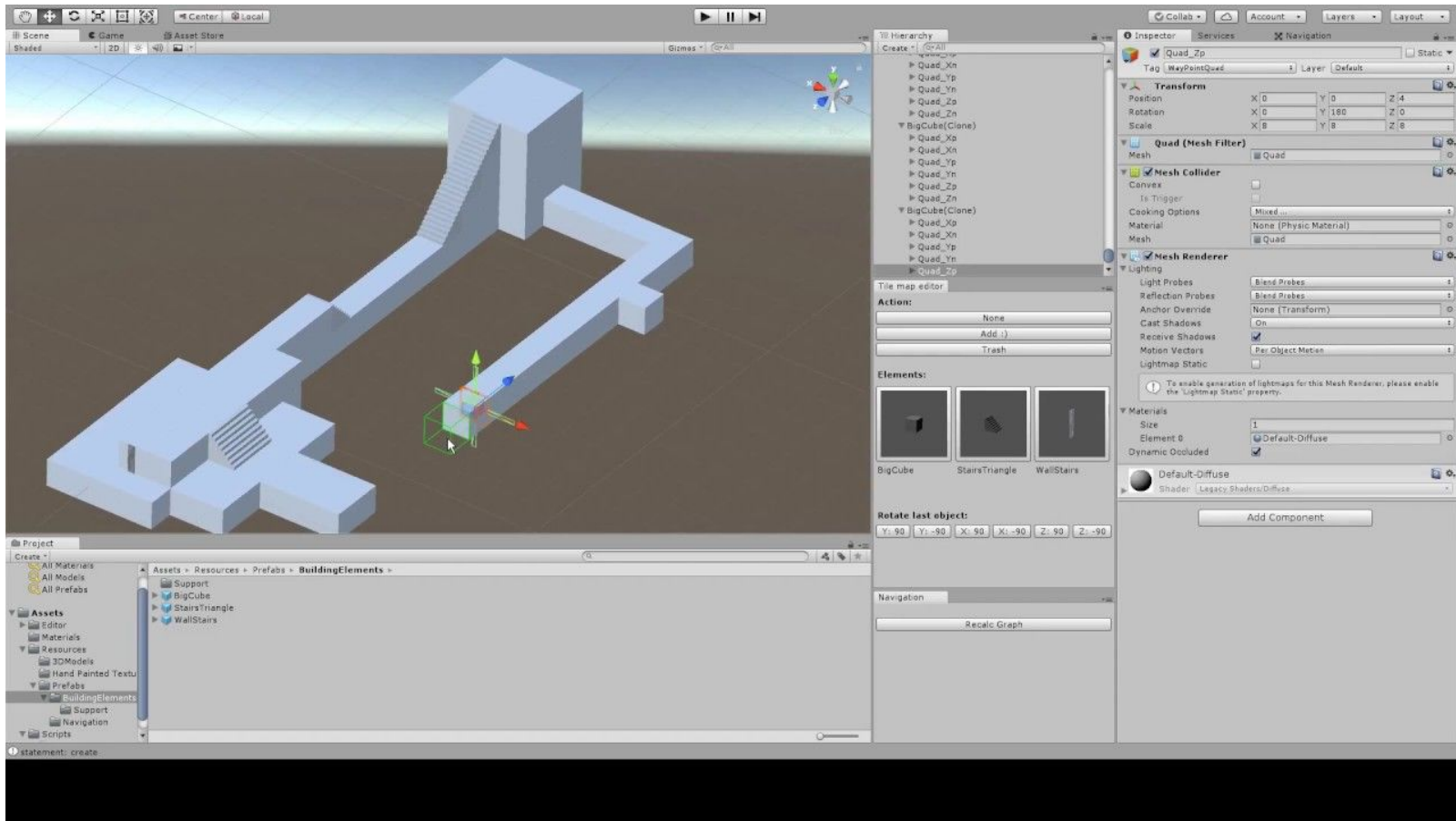
Art by Juna Weng, DigiPen MFA student



“SubRay” - DigiPen sophomore team game

Game Design





Programming

```
BST.cpp  BST.h  main.cpp
19     n->key = key;
20     n->left = NULL;
21     n->right = NULL;
22
23     return n;
24 }
25
26 void BST::AddLeaf(int key)
27 {
28     AddLeafPrivate(key, root);
29 }
30
31 void BST::AddLeafPrivate(int key, node* Ptr)
32 {
33     if(root == NULL)
34     {
35         root = CreateLeaf(key);
36     }
37     else if(key < Ptr->key)
38     {
39         if(Ptr->left != NULL)
40         {
41             AddLeafPrivate(key, Ptr)
42         }
43     }
44 }
```

Ptr
AddLeafPrivate

Programmer or Designer?



Sound Design

Compose music for games

Create sound effects

Audio Engineering

Testing

Tremendously important part of the process

“You don’t know if something actually works until someone else plays it!”

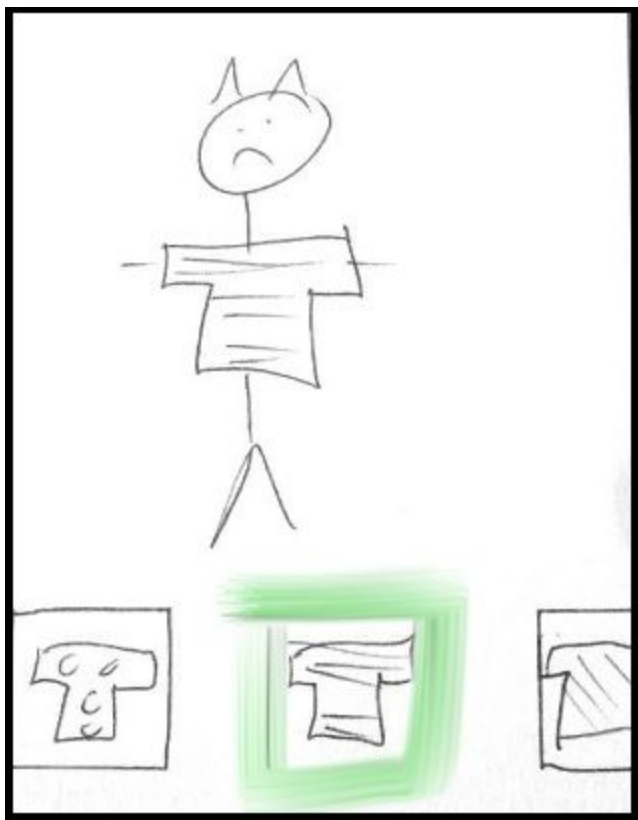
Types of Testing

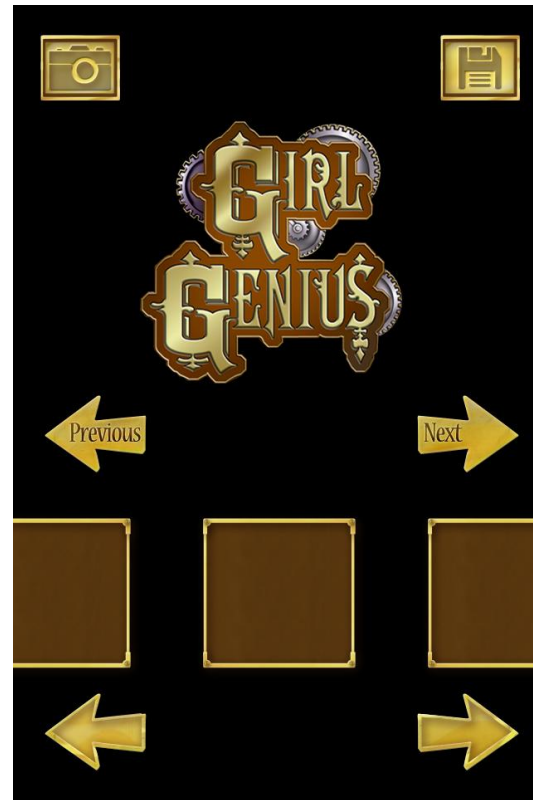
Focus groups

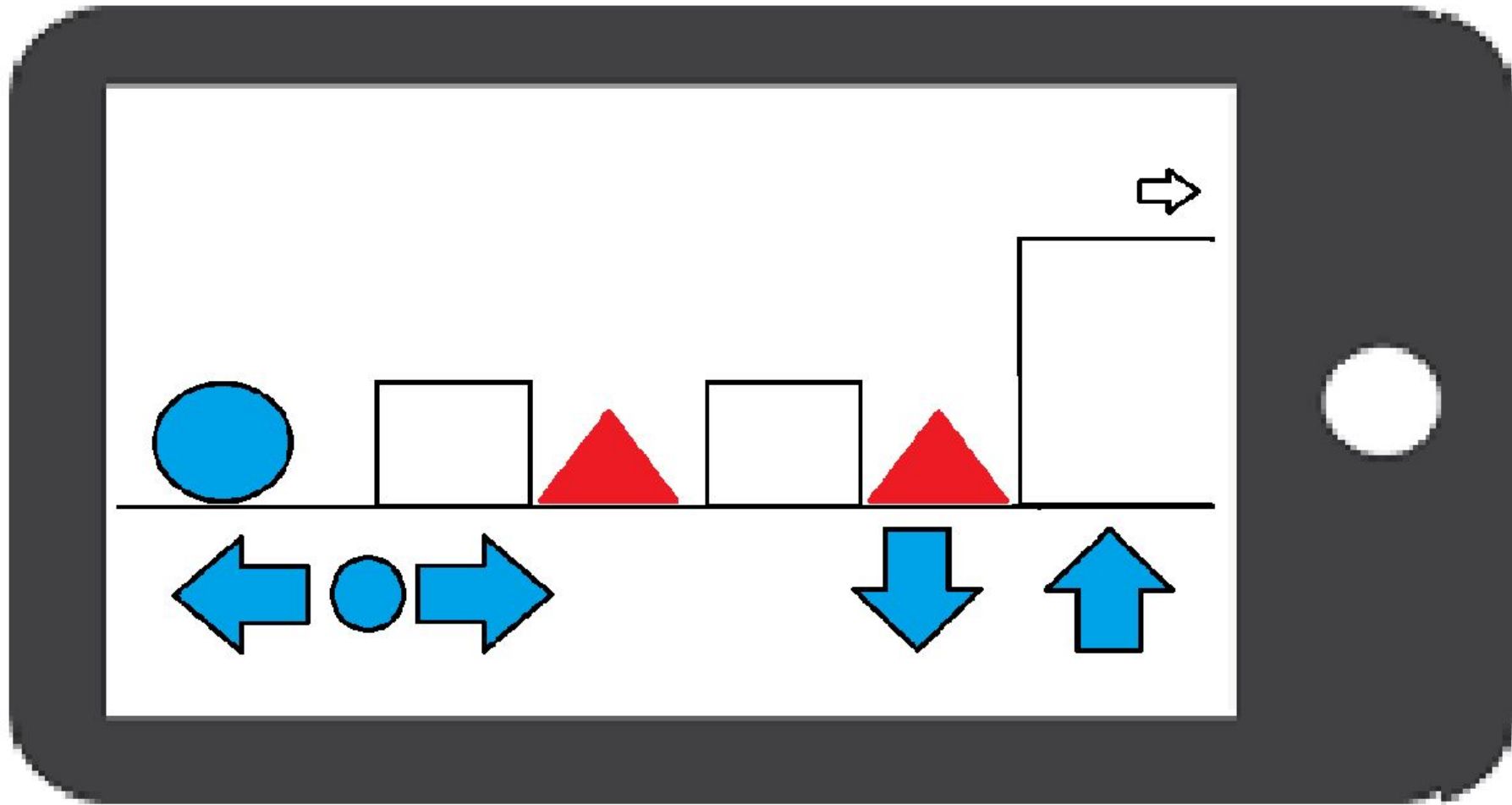
1:1 usability (observational testing)

Surveys

Let's talk about observational testing...







You can run a playtest

Find a game you already know well

Find someone who's never played it before!

Observe and write notes as they play the game

Do they understand the requirements of the game?

Are they having trouble at any specific point in the game?

Ask questions but don't answer them!

Resources for you to start making your own games

Make a (small) game with a game engine like Game Maker or Unity: lots of tutorials online!

Try programming! Khan Academy, Code Monkey, many other free sites

Art tutorials on Youtube, Udemy, and other sites

Online summer programs for middle grade and high school students in art, design, programming, and sound design at DigiPen Academy

Any Questions?

Contact Ellen Beeman at
Ellen.Beeman@DigiPen.edu