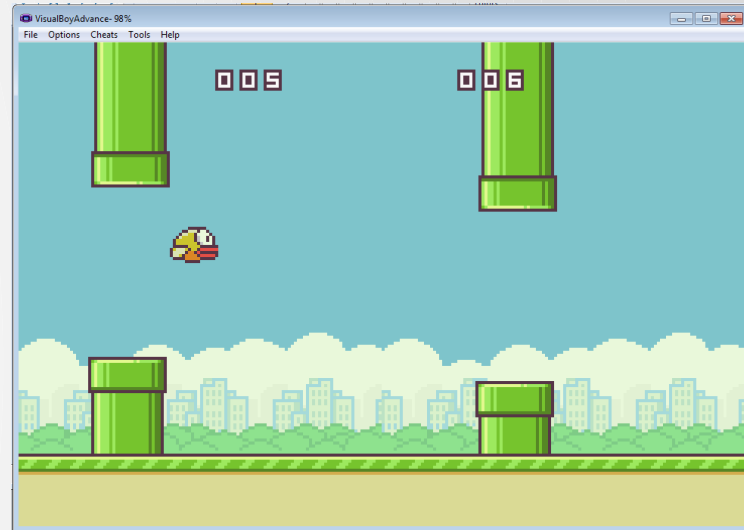
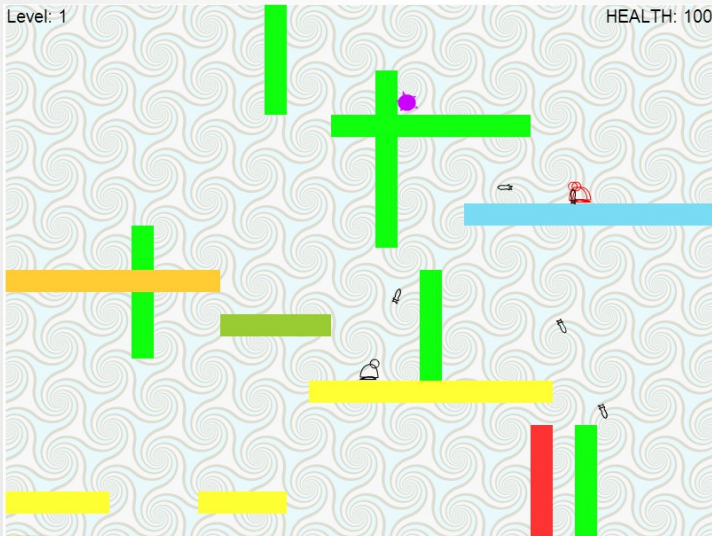


Flappy Bird

Max Kidd 1200890

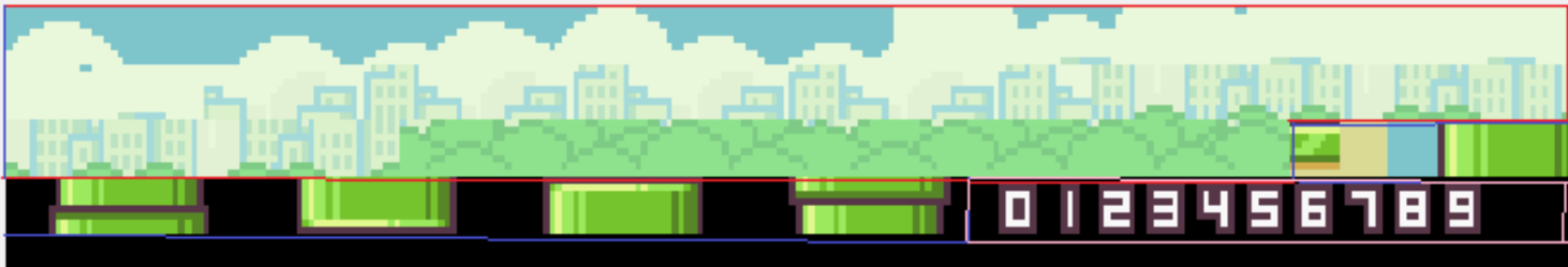
The Idea – Why?

- Sprite-sheet available
- Focus on structure
- Focus on gameplay



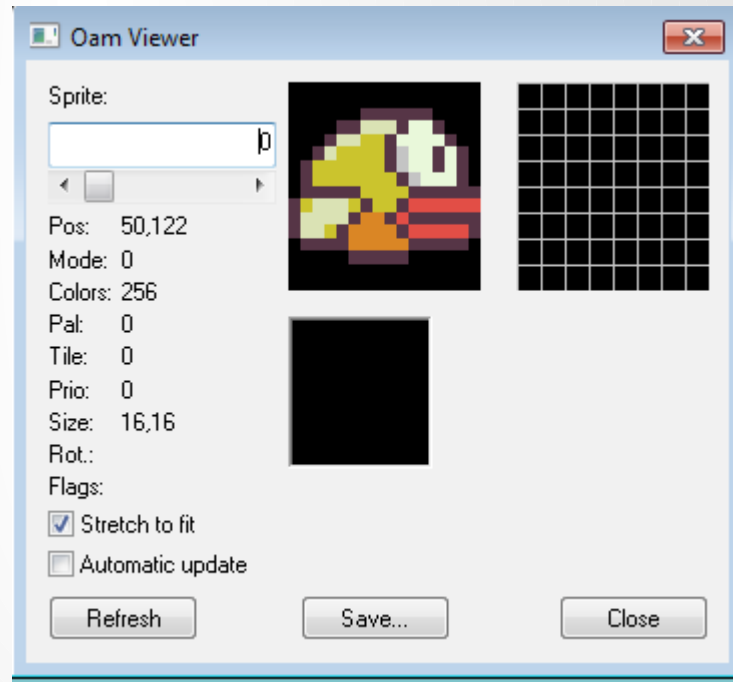
Plan of use for the GBA

- **3 Backgrounds**
 - Background
 - Foreground
 - UI
- Tiles for all backgrounds packed together for space and referenced appropriately



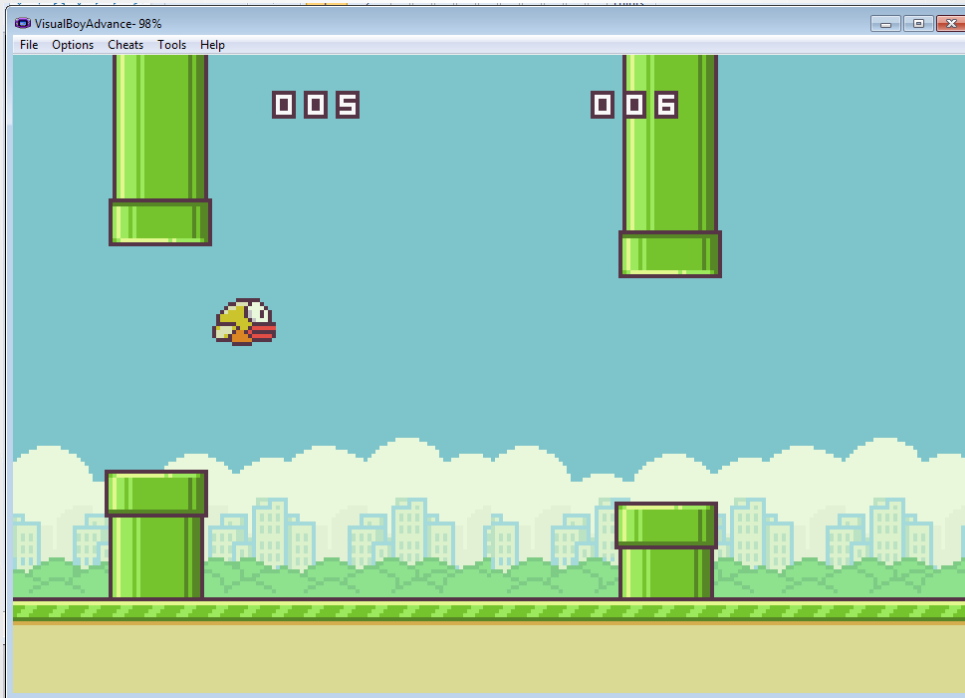
Plan of use... cont

- **1 Object**
- Flappy Bird

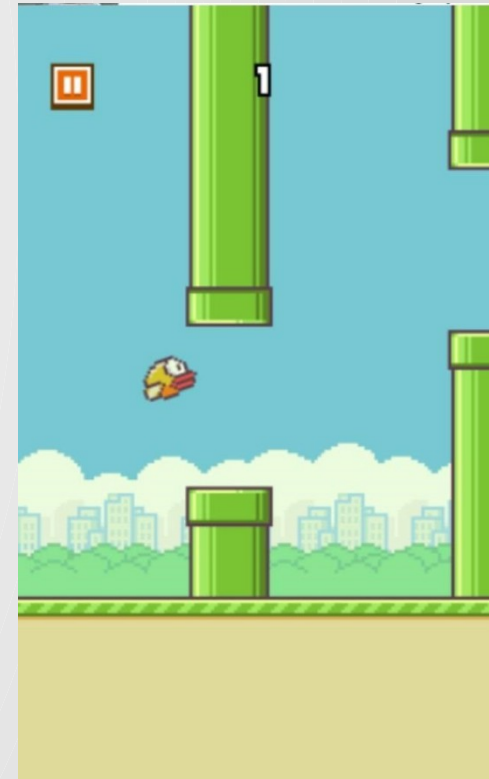


The current look

GBA Version



Real version

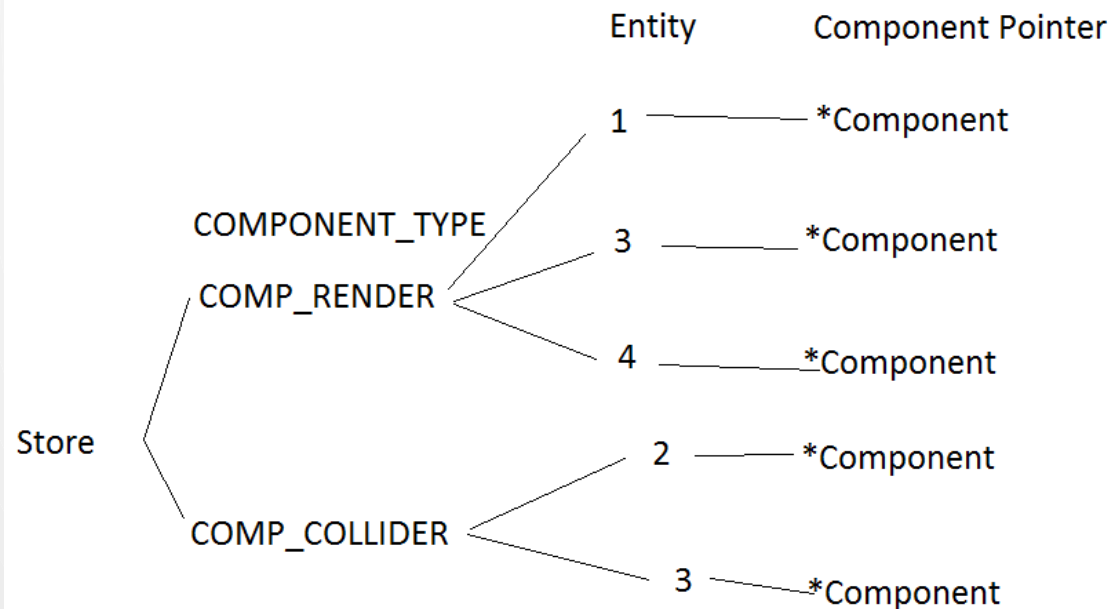


Structure: Components

- Entity-Component based system
- Flexibility and readability
- **Taking notes from**
- Unity
- Ash framework
- Other open source gits

Entity Manager

- The entity manager holds a vector of all the entities
- It also holds a map of all the component types (enum) to another map of entities and a pointer to the actual component



Graphics Manager

- Draw render and background component
- Updates foreground tiles
- Update's sprites position and rotation

Logic Systems

- Background manager
- Collision system
- Player controller
- Update systems

What I've learnt

- Flaws in the system
- Ported the system to AS3
- Working with lots of objects
- A lot of the structure
- Stop overcomplicating

What went well

- The authentic look and feel
- Component based system
- Bjarne Stroustrup lecture
- Readability

Questions?