STARFIELD CITADELS

THE TILE-BASED MULTI-PLATFORM GAME

IAN HALL, CASEY GREUBEL, KRISTEN ERNST
MAIN IDEA

• 2D
• Tower Defense Game
• Earth is destroyed
• Cultivate and build on asteroids
PROJECT GOALS

• Game Structure
• Efficiently Loaded/Rendered Graphics
• Multi-Platform Compatibility
• Space Theme
StarField Citadels
MAIN SCREEN
BUILD MENU
Build a star-dust tree?

BUILD

500

BUILD
BUILD EXAMPLES
RECRUIT MENU

Recruit Soldiers

Recruit an assassin?

6700
FIGHT MENU

Battle #3
BEHIND THE SCENE GRAPH
SOFTWARE & LIBRARIES

• IDE's Used: Eclipse, Xcode
• Language Used: C++
• Cocos2d-x
• Tiled Map Editor
SCENES

- Loading Scene
- Upgrade Scene
- Store Scene
- Combat Scene
- Hero Scene
- Main Scene
GAME LAYERS

- Base Layer
- Animation Layer
- HUD Layer
- UI Layer
CODE STRUCTURE

• Entity Component System
EFFICIENT GRAPHICS

• Asynchronous Caching of Graphics
• Automatic Resizing
MULTI-PLATFORM CAPABILITY

• Android and IOS

• Libraries interpret C++ into OS specific code
PROBLEMS ENCOUNTERED

• Button clicks not working
• Trouble creating labels
• Preloading of graphics
• Pinch to zoom, swipe to scroll
FUTURE IMPROVEMENTS

• Add a fighting system
• Customizable characters
• More items to build
• Character animations
SPECIAL THANKS

• Sydney Ernst
• Dr. Ruben Gamboa
• Dr. Amy Banic
QUESTIONS