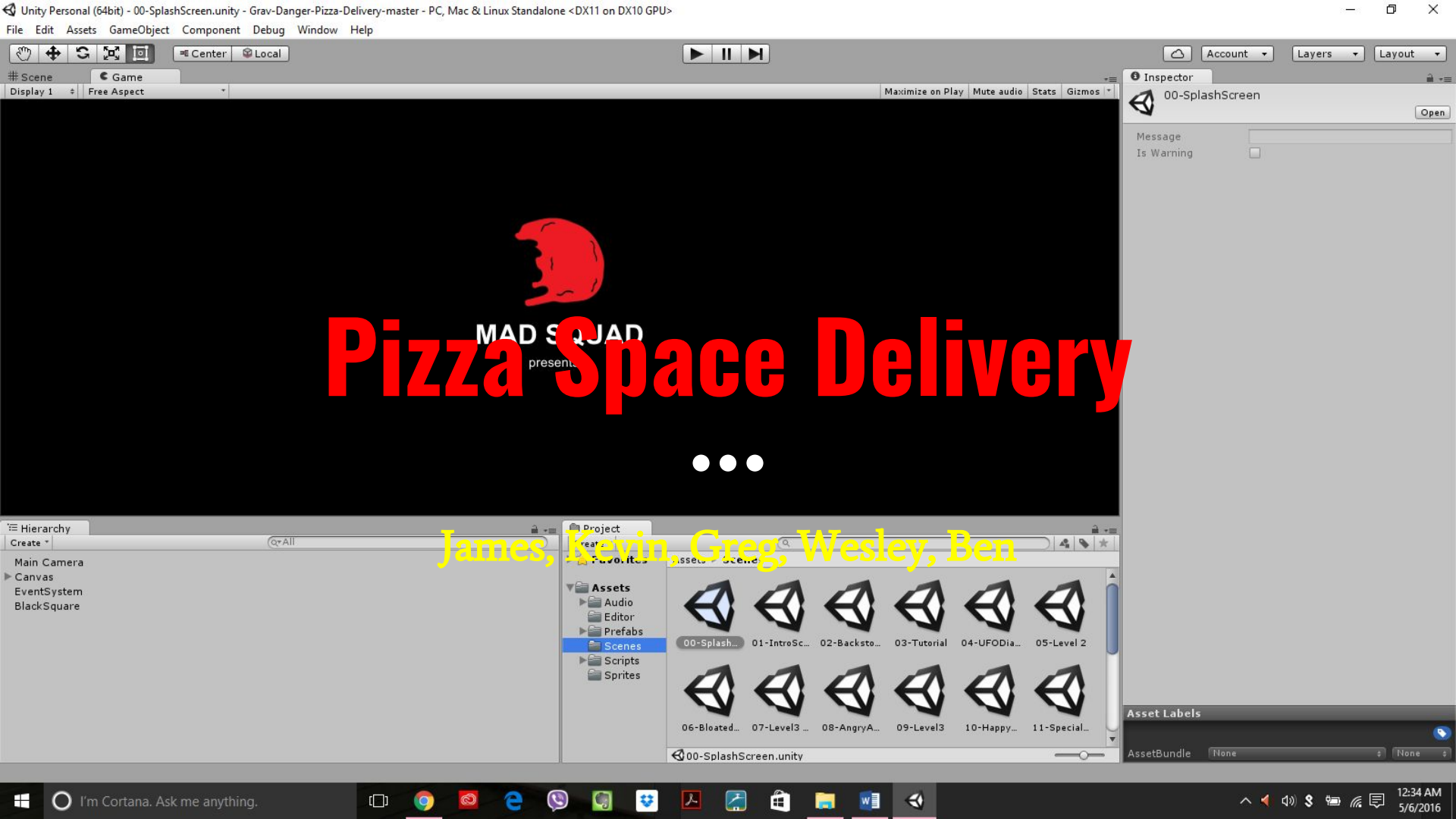
Unity Personal (64bit) - 00-SplashScreen.unity - Grav-Danger-Pizza-Delivery-master - PC, Mac & Linux Standalone <DX11 on DX10 GPU>
File Edit Assets GameObject Component Debug Window Help
Center Local
Account Layers Layout
Scene Game
Display 1 Free Aspect
Maximize on Play Mute audio Stats Gizmos
MAD SQUAD
Pizza Space Delivery
James, Kevin, Greg, Wesley, Ben
Inspector
00-SplashScreen
Open
Message
Is Warning
Hierarchy
Create
Main Camera
Canvas
EventSystem
BlackSquare
Project
Assets
Audio
Editor
Prefabs
Scenes
Scripts
Sprites
00-Splash...
01-IntroSc...
02-Backsto...
03-Tutorial
04-UFODia...
05-Level 2
06-Bloated...
07-Level3 ...
08-AngryA...
09-Level3
10-Happy...
11-Special...
00-SplashScreen.unity
Asset Labels
AssetBundle None None
I'm Cortana. Ask me anything.
12:34 AM
5/6/2016

Overview Implementation

- Pizza Paul 2D game
  - Unity c sharp game
  - Rigidbody2d for physics collisions
  - Sprites for images
  -

Implementation

- Particles
  - BaseParticle: abstract affect player
    - Gravitor: vector player to particle
      - Attractor:
      - Repulsor: reverse
    - Velocitor: velocity vector
      - Fastor: increase
      - Slowor: decrease
  - ParticleSpawner
    - onClick
      - Create BaseParticle
- Collisions
  - Rigidbody2D
  - Collider2D
- Triggers
  - Enemy/Asteroid
    - Call decreseHealth
  - Goal
    - Call try win
  - Particle
    - Call affect

Implementation

- Background
  - Background moves at different speed to give parallax effect
  - ScrollingScript
    - Handle Moving All Tiles at speed x
    - Duplicates center tile 8 times for 9 tiles
  - BackgroundTile
    - Holds position
- Enemy AI
  - 5 states
    - atHome
    - toHome
    - nearPlayer
    - farPlayer
    - hitPlayer

Challenges

- Multiple Particle Types:
  - With multiple particle types, we didn't want to rewrite code over and over (and the particle spawner had many callbacks).
  - Used abstract classes and inheritance for code reuse
- Background Memory/Lag:
  - Couldn't create background across entire map, too much to draw, parallax effect involves moving background, so can't just follow player.
  - Have 9 tiles that move to the correct spot once player leaves tiles.
- UI Lag:
  - Unity Update too slow for UI checking
  - Used delegates and events

Features cut

- Shooting enemies/ enemies shooting
- Enemies with higher AI
-
- Multiplayer (Networking Implementation)
- Dynamic camera movement
- Resource management of particles

Prefabs

- Pizza Paul
- Particles (Blue, Red, Green, Yellow)
- Starry Background
- Toppings (Mozzarella Packs, Tomato Sauce, Anchovy, Mushroom, Pepperoni)
- Enemy (Aliens, Evil Calzone)
- Planets
- Sprites