# Jiggy: The Rad Puzzle Game

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## Game Objective

- Start with a predefined complete shape that visually breaks up into multiple pieces sent to random locations
- A player controls an individual piece and works to rebuild the original shape within a set amount of time
- Win levels by successfully recreating shape

## Implementation

- Modular text file based level generation
- Native compilation on Windows and Mac OS X
- Included support for collision detection
- Unique namespace
- Neat file structuring

# Graphics

- Custom coded OpenGL support library
  - Model view controller pattern was helpful for C++ interfacing
  - Library was a pure C library
- Each shape has a "data block"
  - A function handles the data->graphics conversion discretely for each type.

# Shapes

- Jiggy breaks the complete shape up into predefined smaller shapes that are inherited from a base Shape class
- Currently supports Rectangle, Arc (Circle that can have slices out of it) and Triangle shapes
- Easily able to add support for more shapes

#### **Future Additions**

- Online multiplayer
  - Firebase
- Different platforms
  - Android
  - iPhone
  - o others