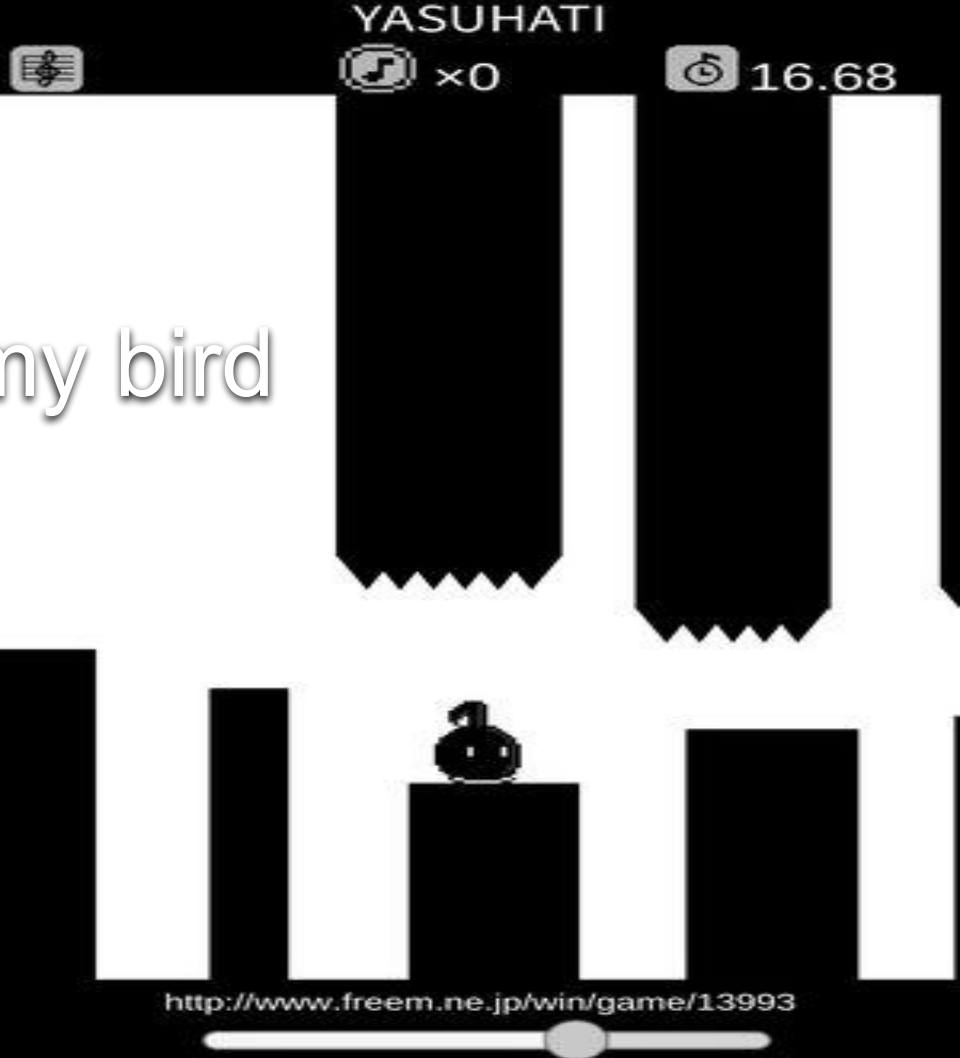
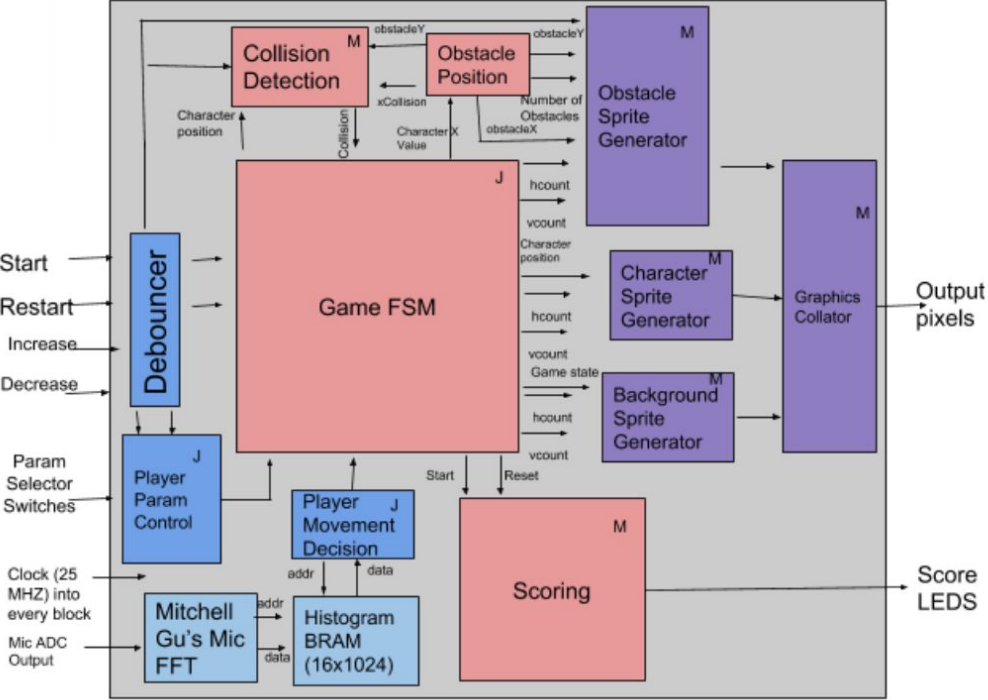


Screamy bird



# Major Divisions



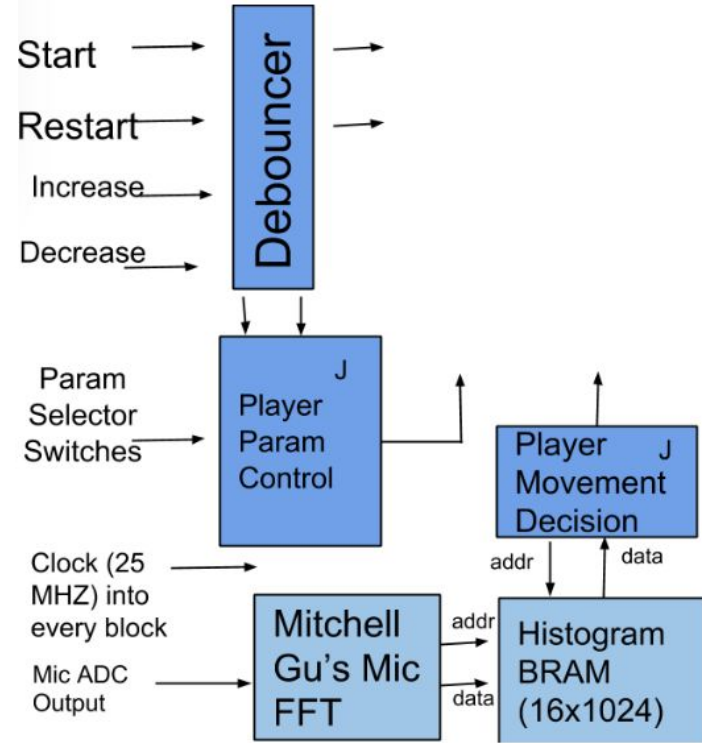
Player Inputs

Game State

Graphics

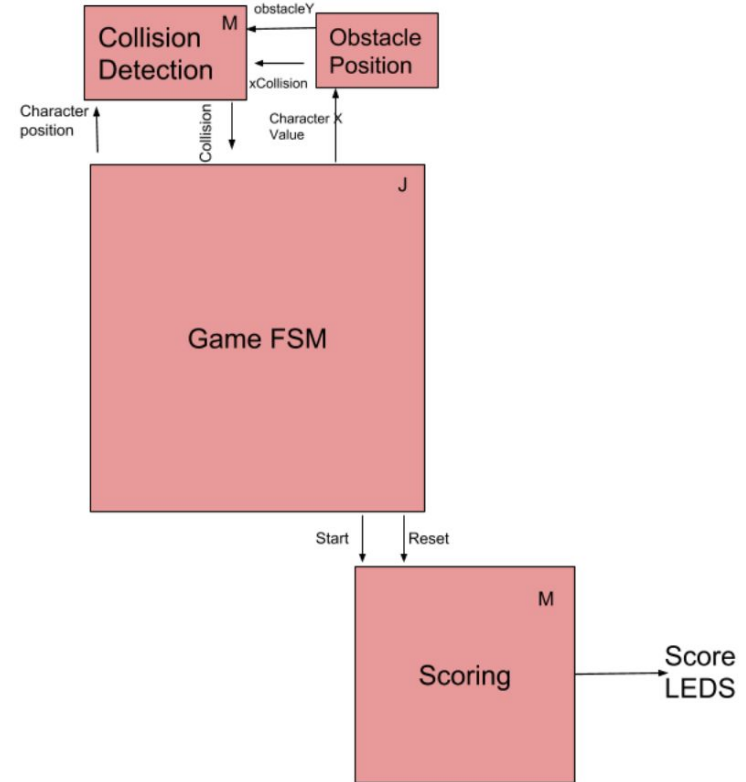
# Player Inputs

- Uses FFT demo to get frequency bin values
  - Will sample bin values to make movement decision
- Contains speed adjustment, difficulty adjustment, volume adjustment, sensitivity adjustment and debounced inputs
  - Parameters will have default values that can be changed mid game
  - Changes will only be loaded into the game FSM at the start of a new game



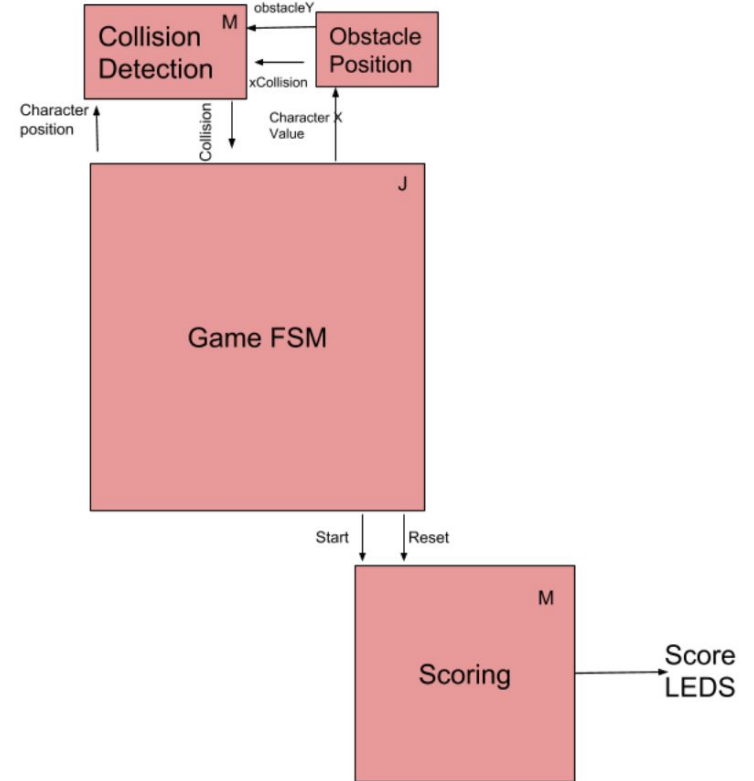
# Game State

- Main Game FSM
  - Keep track of game state
- Obstacle Position
  - Represent entire game as a map longer than the screen that wraps
  - All obstacles are stored in a circular array
    - This represents a fixed map position
    - Uses character position to determine visible obstacles



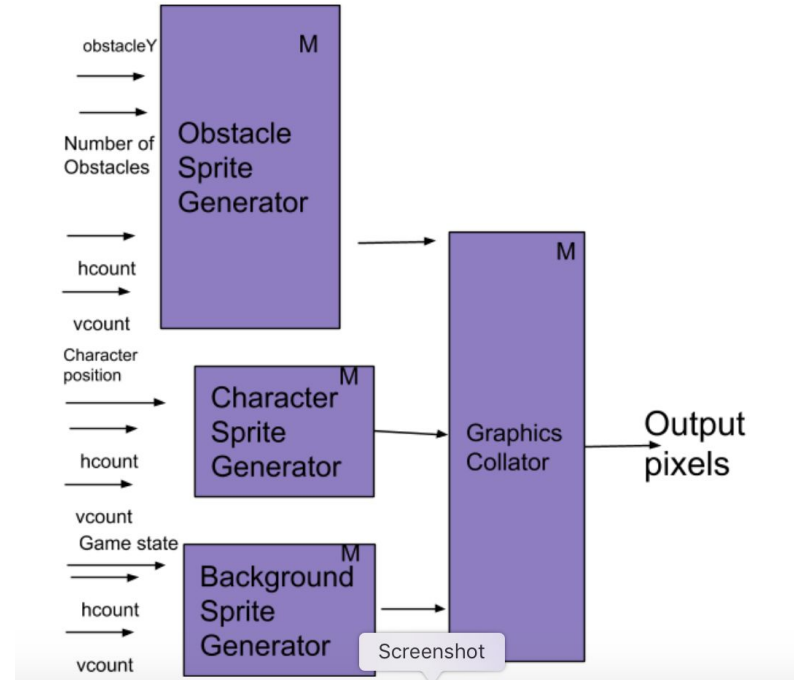
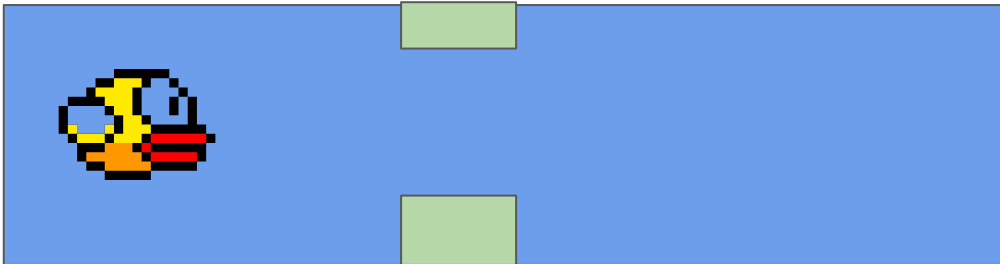
# Game State (cont.)

- Collision Detection
  - Takes in
    - current player position,
    - If an obstacle matching the player's current x coordinate
    - that obstacle's y position
- Scoring
  - Score based on number of seconds alive
  - Will be shown on the nexus7's display



# Graphics

- Obstacle, Character, and Background Sprite Generators
- Graphics Coallator
  - collects all of the sprite outputs to determine each pixel



# Additional Goals

- Sound
  - Could include noises on start/loss
  - Would need to have microphone off when played
- Second Axis of Movement
- Vertically moving enemies
- Record/Replay mode

# Timeline

11/11

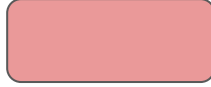
11/18

11/25

12/2

12/9

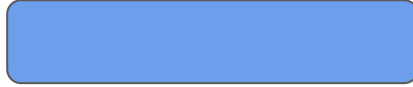
Bare-minimum  
game state\*



Character  
Sprites



Voice Control



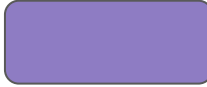
Param Settings



Obstacle Position



Obstacle Sprites



Scoring



Reach Goals/Debugging



\*includes collision detection and game status state machine