CSEE4840 Project Presentation

Watch Out!

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Gameplay

- Player moves from platform to platform with rotary switch as controller
- Landing on platforms increases the score
- Different platforms create different challenges
- Difficulty increases as score increases
- Object of the game is to get the highest score
General Architecture
Rotary Controller

FSM State Diagram

Circuit Diagram
Audio

Configuration
  6000 Hz for background music
  3000 Hz for effect sound

Software
  Interrupt CPU to ask for next 32 background music data
Video

- **Tile Based Architecture**
  - 30 rows x 40 columns of 16x16 pixel tiles
  - Tiles scroll at varying speeds

- Player is a sprite that can be placed anywhere
Game Control

- **Main Loop**
  - Platform Generation
  - Player Position Updates
  - Score and Health Updates

- **Screen Refresh**
  - Draw Score and Health
  - Draw Player
  - Draw New Platforms

- **Audio Refresh**
  - Feed new data to buffer from SRAM
Contribution

- Zach
  - Video
  - Software
- Shangru
  - Audio
  - Rotary Controller
Conclusion

- Well-designed Tiled-base Architecture
- Reasonable SW-HW workload allocation
- Interesting Game
- Had Fun and Cooperated Nicely
Demo

Have Fun!