Comprehensive Design Review

Team Castle Quest
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Team Castle Quest

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CSE

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CSE
Project Overview

- Electronic entertainment is no longer group-centric
- Virtually multiplayer, physically singleplayer
- Market and psychological demand for group centric games, especially board games

- Castle Quest is a electronic 4-player fantasy board game centered around an electronic Castle
Previous Block Diagram
Original CDR Deliverables

- Fully Implemented Java Project - Sarah
  - Able to “play game” through command line
- PCB Prototype soldered - Dev
- Functioning LED matrix - Eric
- Printed Castle - David
- Finished UI - David
- Game Board Mock Up - Dev
Sarah’s CDR Deliverables

- Built Castle
- Designed Board Graphic
David’s CDR Deliverables

- Programmed UI in Java Swift
- Programmed Gameplay in Eclipse
- Collaborated with Eric to integrate game UI with player/LED movement
- Established USB and Local saving/loading capabilities
- Updated Player Manual
Devrim’s CDR Deliverables

- Assembled LED interface on gameboard.
- Debugged wiring.
- Designed and printed PCBs.
- Tested PCBs for functionality.
Eric’s CDR Deliverables

- Set up I2C communication between RasPi and Arduino
- Constructed physical game board
- Debugged LED wiring
- Wrote LED controller code for Arduino
- Collaborated with David to integrate game UI with player/LED movement
Demo

Outline of demo:

a) Constructed castle
b) Using pcb/battery
c) Playing the game
d) Saving/Loading
FPR Deliverables

- Final Game and Board Assembly
- Testing
  - Software
  - Hardware
  - Integration
- Aesthetics
  - Tower and Board
  - Player Guide
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QUESTIONS?