INTEGRATED DESIGN PROJECT

Milestone Overview

Michael D'Argenio – Electrical Engineering – SS 2019 – Duke TIP



Three Key Milestones

- Preliminary Design Review (PDR)
 - Tuesday Afternoon Session
- Alpha Demo
 - Thursday Morning Session
- Final Demo
 - Friday Afternoon Session



PRELIMINARY DESIGN REVIEW



PDR - Deliverables

- Project Introduction & Motivation
- Product Requirements
- Roles & Responsibilities
- Hardware System Architecture Diagram(s)
- Software System Architecture Diagram(s)
- Project Management Plan
- Test/Demo Plans
- Issues/Risks

PDR - Logistics

- PDR with only instructor and TA
- 10 minute presentation on deliverables
- 5 minute discussion and Q&A



PDR - Goals

- Finalized all on-paper project deliverables
- Should include final on-paper design



ALPHA DEMO



Alpha Demo - Deliverables

- Project Introduction & Motivation
- Updates on any of the following:
 - Product Requirements
 - Roles & Responsibilities
 - Hardware System Architecture Diagram(s)
 - Software System Architecture Diagram(s)
 - Project Management Plan
 - Test/Demo Plans
 - Issues and Risks
- Demonstration (described on next slide)



Alpha Demo - Logistics

- Thursday Morning Session
- Demo only with instructor and TA
- 5 minute overview of project and revisions to deliverables
- 10 minute demonstration
- 5 minute discussion and Q&A



Alpha Demo - Goals

- Each individual subsystem functioning correctly.
- Good plan in place for integrating subsystems.
- Solid test plan progress.
- Evaluate stretch goals.



FINAL DEMO



Final Demo - Deliverables

- Project Introduction & Motivation
- Finalize Documentation
 - Product Requirements
 - Roles & Responsibilities
 - Hardware System Architecture Diagram(s)
 - Software System Architecture Diagram(s)
 - Project Management Plan
 - Test/Demo Plans
 - Lessons Learned
- Final Demonstration (described on next slide)

Final Demo - Logistics

- Friday Afternoon Session
- Demonstration to entire class
- Brief project overview
- 5 minute demonstration
- Present Final Design Poster
- Final documentation turned into instructor



Final Demo Design Poster

- Project Introduction & Motivation
- Product Requirements
- Roles & Responsibilities
- Hardware System Architecture Diagram(s)
- Software System Architecture Diagram(s)
- Lessons Learned/Future Improvements

Final Demo - Goals

- All subsystems integrated and working correctly without bugs.
- 100% of Test Plan completed.
- Polished presentation and demonstration to class.



