

EECS 298: Embedded Software Synthesis Lecture 9

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Lecture 9: Overview

- Course Administration
 - Final course evaluation
- Project Status and Progress
 - Final assignment: Technical Report
- Presentations on SpecC projects
 - Tic-Tac-Toe Game (Trevor Harmon)
 - Digital Camera (Aseem Gupta)
- Project Issues
 - Open discussion
 - Individual discussion

Course Administration

- Final Course Evaluation
 - 8th through 10th week
 - Nov. 17, 2004, 8am through Dec. 5, 2004, 11:59pm
 - Online via EEE Evaluation application
- Feedback from students to instructors
 - Completely voluntary
 - Completely anonymous
 - Very valuable
 - Help to improve this class!

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Project Status and Progress

- | | Schedule |
|---|----------|
| • Option 1: Hands-on Experience with Embedded Software | |
| – CJC: Mobile IP (embedded Linux) on wireless access point | TBD |
| – CBH: Port PalmOS application to WindowsCE | TBD |
| – SYC+CWS: Traffic light controller on Xilinx board | TBD |
| – QKN + RL: Temperature sensor on flash microcontroller | TBD |
| – ML + HL: Instant messenger application on mobile phone | TBD |
| – KLN: Snake game (Java) on mobile phone | TBD |
| – SI: Real-time UML/Java appl. wallet PDA, cash register PC | TBD |
| • Option 2: Literature Research | |
| – HEC: RTOS survey | Week 6 |
| – KDS: Target processor survey | Week 7 |
| – GK: Power management for embedded applications | Week 7 |
| – EKS: Code generation for embedded processors | Week 8 |
| • Option 3: Embedded Software Synthesis using SpecC | |
| – JHB: Reed-Solomon decoder | TBD |
| – AG: Digital camera | Week 9 |
| – TWH: Tic-tac-toe game | Week 9 |
| – GS: Wireless sensor node measuring motion | TBD |
| – ISG: Elevator controller | TBD |
| – HCL: Algorithm evaluation for fair packet scheduling | TBD |

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Final Project Report

- Option 1: Hands-on Experience with Embedded Software
 - Technical report about your project
 - Introduction
 - Description of project idea, goals and expected results
 - (re-use your project proposal!)
 - Description of project implementation
 - Approach taken
 - Difficulties encountered
 - Solutions
 - Experiments and results
 - Description of project result
 - Conclusion
 - Lessons learned
 - References
 - Appendix

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Final Project Report

- Option 2: Literature Research
 - Technical report summarizing your research results
 - Introduction
 - Introduction your topic with respect to embedded software
 - (re-use your project proposal!)
 - Scope
 - Research boundaries
 - Examples chosen (why?)
 - Criteria investigated
 - Description of each chosen example
 - Summary of criteria
 - Comparison of chosen examples
 - Conclusion
 - Lessons learned
 - References
 - Appendix

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Final Project Report

- Option 3: Embedded Software Synthesis using SpecC
 - Technical report about your project
 - Introduction
 - Description of project idea, goals and expected results
 - (re-use your project proposal!)
 - Project specification
 - Description of specification model
 - Project implementation
 - Description of design flow
 - Difficulties encountered
 - Project result
 - Description of project result
 - Conclusion
 - Lessons learned
 - References
 - Appendix