The Home Stretch

The Plan

- Review of the Design
- The Last 10%
- Freezing the Project
- Ensuring Success
- Cutting your losses
- Testing
- Documentation
- Enhancements

Review of the Design

- Late for Serious Changes
  - May be some course correction possible.
- Often: Simplification rather than enhancement
  - Shed some frills.
  - Narrow down some of the goals.
- When Adding Things: Must be Orthogonal!
  - Orthogonal: Will not adversely affect other parts.
  - Don’t risk project for that “just one more”.

The Last 10%

- You may think you’re almost done
- Common wisdom is:
  
  The last 10% of a project takes up 
  90% of the time.
- Allow for the unexpected
- Prevent serious problems by testing as you go
- Don’t put off fixing a problem to go to another enhancement
Freezing the Project

- Earlier rather than later, quit adding features
- Make sure what you have is done right
- Allow for the unexpected
- Resist the lure of enhancements
- Spend any extra time to make product more professional

Ensuring Success

- Always have a working project
  - After some natural increment (with everything so far working) save a complete copy (project).
  - Think of it as a simpler version.
  - Don’t lose or change this copy.
- Start the next version
  - After significant progress, repeat this process.
- Too often, a formerly working project is “destroyed” by improvements
  - It may never work again.
  - You must have a previous version to fall back on.

Cutting your Losses

- Sometimes: Nothing Seems to Work
- Before it’s too late:
  - Severely prune your goals.
  - Get help from instructors for this.
  - A Simple Working Project
  - ALWAYS RATES HIGHER than a Fancy Non-Working Project

Testing

- “Testing can prove the presence of bugs, but not the absence of bugs.”
- Games: different standard from most software
  - Bugs sometimes become features.
- Errors can be costly, however
  - When demo-ing for your grade!
  - When showing off for your date.
- Test Plan
- Testing by a naïve user
Documentation

- Javados provide imbedded documentation
- Traditional
  - User manual.
  - Technical/Program Logic Manual (for heirs).
- On-line documentation
- Legal / for Grade
  - Make clear who did what work and when.

Enhancements

- *If you have time …*
  - Make sure you have polished main parts.
  - Make sure you do not risk previous work.
- Enhancements can be a lot of fun
  - They might add that extra sparkle.
- The pressure is off
  - Little cost: if it doesn’t work, *back it out*