

Project Management

Project Scheduling

Week 3 Winter quarter

1/23/02 SOS

Objectives

- Reviewing Goals, Scope, Criteria for Success
- Review first homework solution
- Identify the critical path in a project
- Create a project schedule

Egg Drop Project

- Goal
 - To create an inexpensive and attractive structure such that an egg will survive intact when dropped from a one story building.

Goal

- To create an inexpensive and attractive structure such that an egg will survive intact when dropped from a one story building. or
- To win the contract or
- To create a design such that we win the contest
- ***Notice how the slightly different worded goals can focus the team differently.***

Scope

- Can only use provided materials for container
- Only has to survive a drop once
- Does not need easy access to put the egg in or take the egg out.
- Only have an hour and a half to complete

Criteria for Success

- Eggs survives intact from drop – very easy to measure
- Least expensive design - had to rely on team's accuracy – did you include R&D costs? I.e. damaged materials from testing; slightly more difficult to measure
- Attractive- very difficult to measure & ambiguous
- ***Or would you consider the project a success if it could survive a drop from the 4th floor instead or if the design doesn't win the contest?***

Assumptions

- Can use tools (not provided) for construction purposes
- Assume that other teams will be successful in designing a structure to protect the egg; therefore concentrate on reducing cost and increasing attractiveness.
- Not considering labor cost to construct
- Assume that instructors will drop and not throw structure

Assumptions, cont.

- Can use two eggs for testing purposes
- requires a cost analysis sheet by 11:35
- requires a finished design by 11:40
- Priorities are that first, that the egg not break;
- second is that it be the cheapest compared to all other groups;
- third is that it be attractive

Lessons learned

- Planning - helps to plan ahead rather than just jumping in and tasking to build
- Goal - keep the goal in mind
- dissenting opinions can contribute to a better design
- how to have more than one idea considered; listening to other's ideas

Egg Drop

- Common mistakes:
 - assigning tasks - as roles or titles
 - you can assign one task to more than one person
 - Goals: what you are trying to accomplish
 - scope: boundaries
 - criteria for success: measurable outcome

Schedule

- Shows who is doing what when
- shows a timetable with task dates, finish dates, and assigned responsibilities

Schedule

- How to juggle when the inevitable problems arise
- You have a problem – equipment is late, something is taking longer than it should; someone gets sick – you want to know – how does this impact the schedule? What action should you take to ensure that you can still meet your schedule deadline?

Network Diagram

- Representation of tasks that defines the sequence of tasks
- lines drawn in between tasks indicate precedence

Gantt Chart

- A chart that uses timelines and other symbols to illustrate multiple time based activities on a horizontal time scale