Lecture Review Sheet: Project Management Jim Hoover CMPUT 299 Winter 2006

Project management is the activity of organizing people to follow a process to solve a problem.

The project team is composed of people. You need to identify skills that are present and absent, and the personalities of your team members.

- Each team member has multiple roles
- Roles are based on needs and skill sets
- What role you play depends on tasks in progress
- Roles should be allocated to balance load during the project.

To ensure checks and balances, certain roles should not be played by same person:

- Manager keeps track of tasks
- Creative Director maintains artistic vision
- Producer keeps project on budget

Every project needs some process for managing the project. Process = Planning + Execution

- Problem solving generates tasks
- Planning organizes tasks
- Planning is continuous:
 - Maintain a task queue
 - Assign priority to tasks
 - Assign tasks to people
 - Monitor status to maintain situation awareness
 - Re-evaluate tasks, priorities, assignments
- Keep all your artifacts in a frequently backed-up repository.

Each project is organized as a sequence of phases Each phase defines a chunk of progress. While the producer defines the phases, it is the manager who defines details of phases through the task queue.

Phases tend to be organized in spirals from the inside outward. Each spiral achieves an increment in the project. A spiral will have a mix of increment styles as determined by the strategy step of the spiral. Increments can be Broad and Shallow; or Narrow and Deep. A spiral has the following steps:

1. Strategy –

- What are we trying to do?
- Does it make business sense?
- How do we measure success?
- 2. Analyze what do we want to do?
- 3. Design how are we going to do it?

- 4. Implement do it
- 5. Test did we do what we intended?
- 6. Deploy evaluate and release results to next spiral

The spiral approach works for almost all problems.