

# Agile Project Management Sprint Planning

CompSci 408

September 10, 2014

# Significant Semester Requirements

15%	Participation: in-class, at meetings, setup meetings in timely manner, weekly status reports (individual grade)
15%	Writing: executive summary, project plan, design documentation (team grade)
15%	Deadlines: sprint deadlines met and meeting planning done in timely manner (team grade)
15%	User Testing: evidence users have tested, feedback report (team grade)
15%	User Friendly Design: easy, non-programming, way for user to change client data (team grade)
25%	Client Satisfaction: client consistently reports good progress (team grade)

# Discussion Topics

- Project Management
  - Timeline with Milestones
  - Business Requirements
  - Documentation
- Sprints
  - Pre-Sprint Planning
    - Define tasks/stories and estimates
  - Sprint Planning
- Management vs. Leadership



# Project Management

Timeline with Milestones

Business Requirements

Documentation

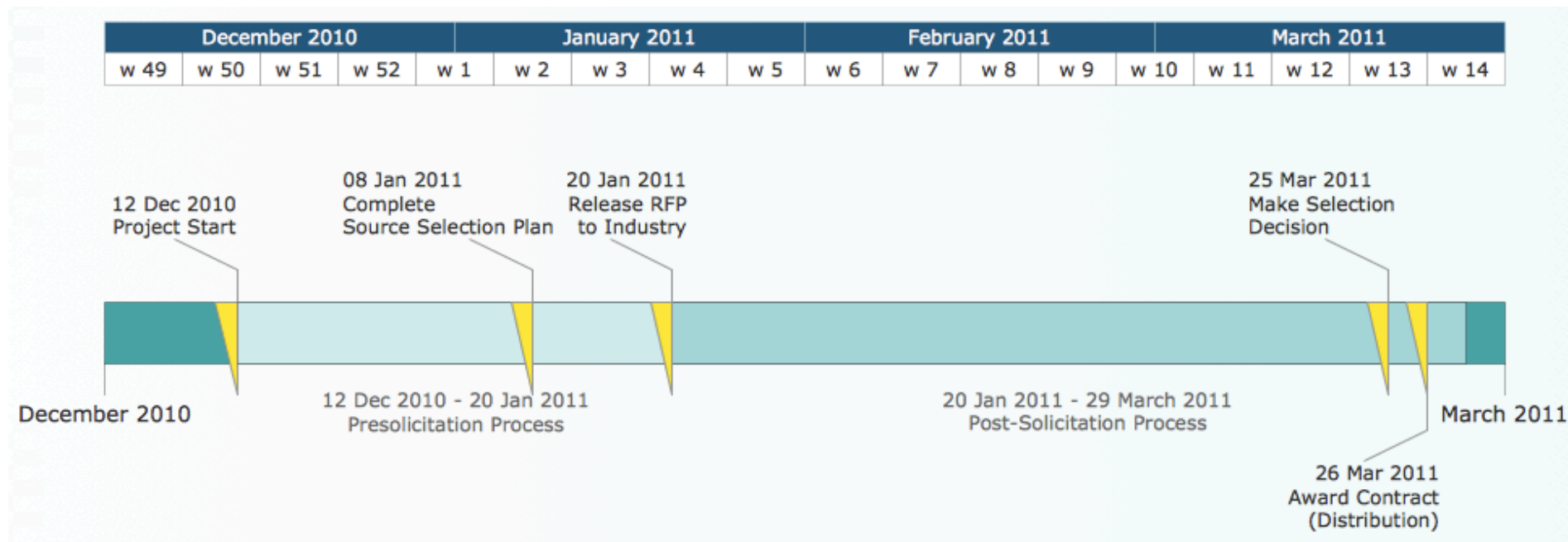
End User Guides (text/multimedia)

Technical Diagrams

# Project Management

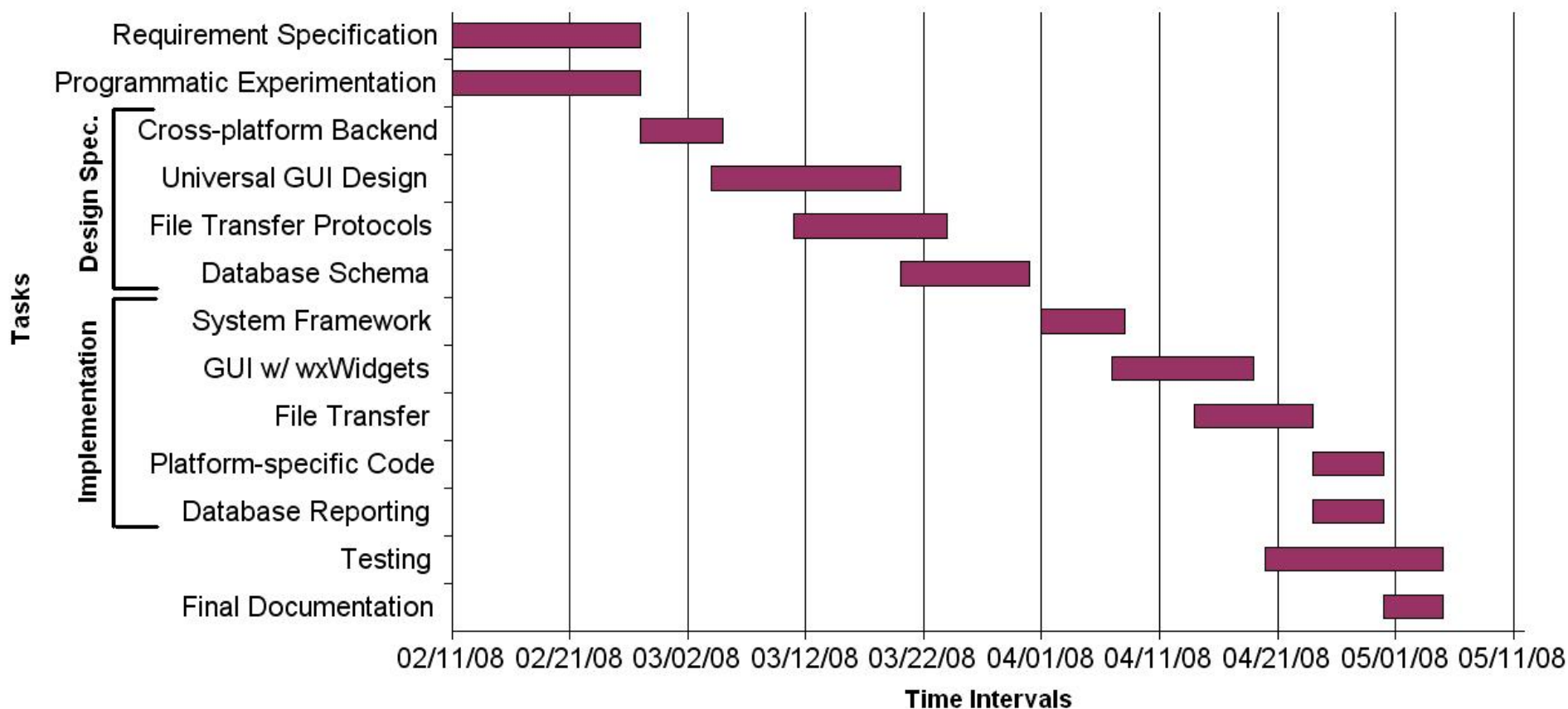
- **Timeline with Milestones**
  - What features? Available when?
- **Business Requirements**
  - User Stories, Context Diagram, Workflow Diagram
- **Documentation**
  - End User Guides (text/multimedia)
    - User, Install, Configuration, Admin
  - Technical Diagrams
    - Diagrams: Architecture, Class, Message Sequence, DB Schema

# Timeline Example 1

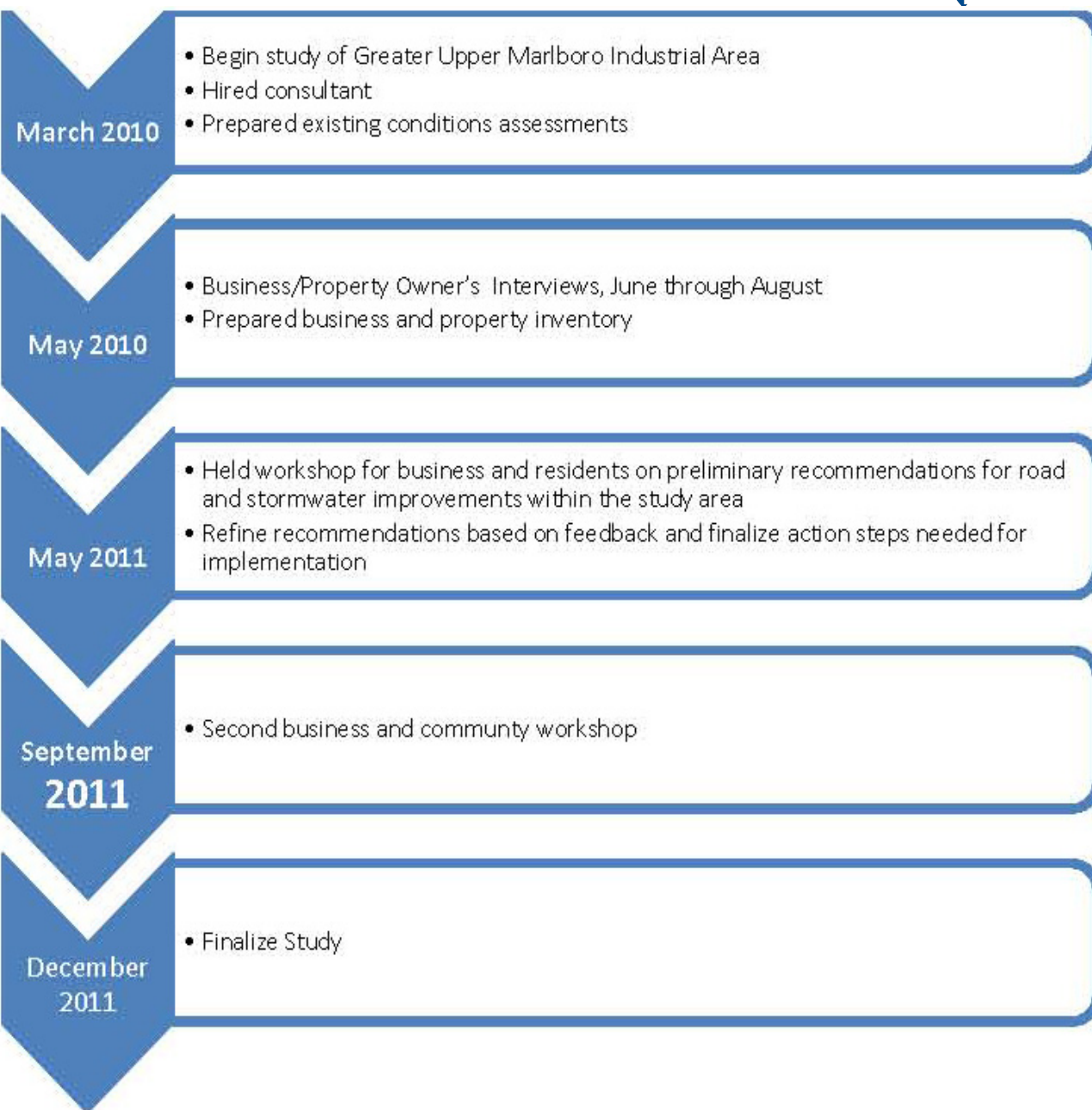


# Timeline Example 2

**Gantt Chart for Project Progress**



# Timeline Example 3





# Recap: Project Management

- Project Management
  - Timeline with Milestones
  - Business Requirements
  - Documentation
    - End User Guides (text/multimedia)
    - Technical Diagrams



# Sprints

## Pre-Sprint Planning

Define tasks/stories and estimates

Shrink tasks

## Sprint Planning

# Pre-Sprint Planning

- Define the **stories**
- Estimate the **tasks**
  - Break **Requirements** into **Tasks** for each Product **Backlog** item in the **Sprint**
  - Break the requirements into tasks.
- **Shrink Tasks** to Improve the Task-Based Burndown.
  - **Small Tasks** to burn down mean a good, informative task-based burndown chart

# Sprint Planning

- Goal: Product Owner and the team to **negotiate** what should be **accomplished** during the sprint
- Set the Sprint **Budget**
  1. Calculate the team's Sprint Budget (total available work hours)
  2. Make any reasonable deductions for time that team members will not be able to spend working on the Sprint.  
Holidays, meetings, other projects, support, etc.
- Establish **Stable Velocity**
  - Use your normal sprint planning process for each sprint until you can demonstrate stable velocity
- **Build the Sprint**
  - Add tasks to satisfy the Sprint Budget and velocity
  - Identify stretch tasks to cover times when the team under-commits or over-estimates

# Calculating Velocity

- Velocity is how fast you are developing software
  - In Scrum, how much product backlog effort a team can handle in one sprint
- Example: 5 person team committed to 25 story points in 2 week sprint

Team Member	Robert	Ajay	Salman	Richard	Ben	Total
Hours Worked	16	10	14	16	14	70

- The team delivered software worth 25 story points in 70 hours.

# JIRA

- Manage project tasks in the context of the Agile Scrum Method
- JIRA Project
  - Repository for all issues (features, defects, tasks)
- Agile Board
  - Manage Sprints
  - Organize Tasks into Sprints
    - Estimate and assign tasks
    - Schedule tasks
  - Track Progress using reports
    - Burn Down Chart

# Recap

- Define **stories** - Estimate **tasks** - **Shrink Tasks**
- Goal: **negotiate** what should be **accomplished**
- Set **Budget** - Establish **Stable Velocity** - **Build the Sprint**
- Calculate Velocity (how fast you are developing)
- Manage project tasks in the context of the Agile Scrum Method
- JIRA Project: Repository for all issues
- Agile Board:
  - Manage Sprints - Organize Tasks - Track Progress



# Management vs. Leadership

“You manage things; you lead people.”

~ Rear Admiral Grace Murray Hopper



# Why Leaders?

- “Workers” need “Managers” not to just **assign tasks** but to **define purpose**
- “Managers” **must lead** not just manage
- “Managers” must organize workers:
  - **not** just to **maximize efficiency**
  - but to **nurture** skills, **develop** talent, and **inspire** results

# Management vs. Leadership

Manager...	Leader...
administers	innovates
maintains	develops
focuses on systems and structure	focuses on people
relies on control	inspires trust
has a short-range view	has a long-range perspective
asks how and when	asks what and why
has his/her eye on the bottom line	has his eye is on the horizon
imitates	originates
accepts the status quo	challenges the status quo
is the classic good soldier	is his or her own person
does things right	does the right thing

# Recap

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