San José State University Department of Computer Engineering CMPE/SE 131 Section 3 Software Engineering I Spring 2017 Instructor: Ron Mak

Assignment #6

Assigned:	Tuesday, March 23
Due:	Monday, April 10 at 11:59 pm
	Team assignment, 100 points max

Project schedule (Gantt chart)

For this assignment, each team will create a **project schedule**, which is a key part of the team's **project plan**. The project plan describes how you will conduct your project to implement what you describe in your product design document.

Create a <u>work breakdown structure</u> (WBS) that you will then use to generate a **Gantt chart**. Since you're using agile software development methodologies, your WBS should include <u>several iterations</u> during code development. An iteration should last 1 or 2 weeks. Include in your WBS the activities that preceded code development, such as requirements analysis and product design, and the activities that follow, such as software deployment and product demonstrations. Show <u>progress bars</u> for activities that are currently underway or have already completed.

Make your Gantt chart as realistic as possible with regards to the overall <u>start date</u>, <u>tasks</u> <u>in each iteration</u> (coding specific modules, creating specific database tables, testing and integration, etc.), <u>time durations</u>, <u>dependencies</u>, and <u>resource</u> (people) allocations. Backfill your schedule with events starting from the beginning of the semester, January 26, such as learning Ruby and Rails, writing the Functional Specification, writing the Design Document. Be sure that your schedule includes <u>milestones</u>. Include past milestones such as the Conceptual Design Review, this week's Design Review, and the following future <u>fixed milestone events</u> (think of them as trade shows with immovable dates):

Event	Date
Conceptual design review	February 28
Design review	April 4
Code review	April 25
Application demo	May 9
Project done	May 17

Use GanttProject (<u>http://www.ganttproject.biz/</u>) to create your Gantt chart. Only a few tasks should have hardcoded start dates (such as January 26). Most tasks should have their start dates automatically determined by their dependencies.

After assigning team members to the tasks, make sure the <u>resource chart</u> shows a workload that is well balanced (not too many times when developers are over- or underloaded).

Note: Your team will <u>not</u> be held to this schedule, so you can be idealistic! Keep the total number of tasks in the WBS under 50.

What to turn in

GanttProject saves a chart as a **.gan** file, which is an XML file. Submit your file to Canvas: **Assignment #6**

Rubrics

Criteria	Max points
Work breakdown structure (WBS)	50
Hierarchical	• 10
Tasks for the entire project (starting January 26)	• 10
Several development iterations	• 10
Milestones	• 10
Fixed events	• 10
Gantt chart	30
 Start times determined by dependencies (only a 	• 10
few tasks should have hardcoded start times)	
Progress bars	• 10
 Resources (people) shown next to the time bars 	• 10
Resource chart	20
 All team members assigned to tasks 	• 10
 Only a few green (< 100%) and red (> 100%) bars 	• 10