

CS 301 Team Project Description – Phase 1

NOTE: Project Description WILL change; This description is for reference only.

Timeline:

- 1: Team formation – Week 1
- 2: Topic selection – Week 2
- 3: Project Proposal – Week 3

Phase 1 Due Date: September 5th, 2019

- 4: Technical design – Week 4, 5
- 5: Coding – Week 6, 7
- 6: Testing – Week 8, 9

Phase 2 Due Date: October 17th, 2019

- 7: Modification – Week 10, 11
- 8: Coding & Debugging – Week 12, 13
- 9: Final report – Week 14, 15

Phase 3 Due Date: December 3rd, 2019

Final presentation: December 3rd, 2019

Project Overview

You will undertake a group project (**3 people - project manager, tech lead, QA**) to design and build a computer-based application related to: healthcare system, or computer games.

Each phase of the project will include a deliverable report. The format of the reports for the individual parts is up to you, but it should be professionally prepared, expressive, grammatically sound, illustrative of your efforts and process, and easy to understand.

Name the report file/folder of each phase as “Phase_N_X_Y_Z”, where “N” is phase number, “X” “Y” and “Z” are the member’s last name. For example, “Phase_1_Smith_Chang_William”.

1: Team formation

Each project group will be graded as a team. That is, each team member receives the same grade if each person contributes equally. At the end of the semester, I will ask each student how much each team member contributed, including themselves. Lack of participation may result in a lower grade at the end. Great teams have great contributors, each contributing equally. Within the team, you must negotiate on

how much and what each person will contribute. Individual contributions should be included in all the reports.

Think carefully about your team members:

- Where do people live and what hours do they work?
- Where and when will you meet?
- What skills do the different individuals bring to the group (project management, programming, design, testing, presentation, etc.)?

I would strongly encourage you to form a heterogeneous team full of individuals with varying types of skills.

2: Topic selection

1. Think **Small**

Most of the applications involve more than six months of work by a number of trained professionals including full-time artists and hordes of programmers, people with years of experience. You need to design a very small project.

2. Plan in **Layers**

"The best laid plans of mice and men...."

You can't accurately anticipate how long each step in your project is going to take. Consequently, you need to make a detailed development schedule that is layered. I suggest this structure:

1. **Functional minimum:** minimal items to make something that you might call an application. You'd be embarrassed if you only got this far, but at least it'd be something.
2. **Your low target:** Your target for what you want to get done--the least possible to feel sort-of OK about the result.
3. **Your desirable target:** This is what you're aiming for, if things go reasonably well.
4. **Your high target:** It might be possible to get this much done, if all goes extremely well
5. **Your extras:** Stuff that you know you can't get done this semester, but you might add later if you decide to keep working on after the class is over, just for fun.

Structure your development so that you complete each layer before going on to the next. Plan exactly what is entailed in each layer, and which team member is going to do each component.

3: Project Proposal

Components of your proposal:

1. **Description of Your Project:** Describe the project in detail: approximately one to two pages text.

2. **Layered Development Schedule:** Break your project down into the 5 layers described above and give a schedule for when you expect to complete each layer.
3. **Team Member's Role:** Who is responsible for which part? When and where do you plan to meet?
4. **Assessment:** Tell us what the main usage of the application will be. Who might want to use this application? What will they do with this application? What criteria should be used to judge if your design is a success or not?

Your proposal document may be shared with other groups for them to perform a design critique. Your group may also get other group's design documents to critique.

Phase 1 Presentation

September 5th, 2019

Each team should give a brief 10 minutes presentation of your project in class. Every team member should present your role and contributions for each part of your project during the presentation. Other teams may provide feedback and comments to your team.

Phase 1 Submission

Submit all required documents on Blackboard for phase 1, including your team member's name, net ID, skills (programming, design, etc.), when and where will your team meet each week, what have you discussed in each meeting, what is each member's role and contribution, etc. along with your project proposal.

You can submit a compressed file such as a Zip file.