

**EE308FZ Software Engineering**

Lab 7 Topic selection and requirement analysis of team project

**Task Deadline: 2021-12-03**

1. This team task is: team introduction, topic selection report, requirement analysis report
2. The rating of this task includes: blog essay 30%+report document 30%+on-site defense 30%+video introduction 10%
3. Time nodes you need to pay attention to:
   1. The deadline for forming a team is 22:00, 2022/11/19. Please complete [The Online Form](https://docs.qq.com/sheet/DQ0Nqb1JudFdOdUl4?tab=BB08J2) for forming a project team for this course before this time node
   2. The deadline for submission of the first materials is 23:00, 2022/12/02. Please submit report documents and defense PPT in the course group before this time node
   3. The offline on-site defense time is 08:20, 2022/12/03. In the morning, the on-site defense was held in Room S302/S304/N305, School of Electrical Engineering
   4. The deadline for submission of complete materials is 22:00, 2022/12/04. Please submit your blog assignment before this time node and upload the completed report document in the course group (please mark the modification)
4. Notes for submission:
   1. The number of blog essay is 1 piece/person, which can be shared within the group, but **each group member is required to submit**, and the title of the blog is ID group - topic selection and requirement analysis report
   2. The number of report documents is 1 piece/group, which needs to be submitted to the course group. The format is named ID group - topic selection and requirement analysis report.pdf
   3. The number of defense PPT is 1 piece/group, which should be submitted to the course group in the format of ID group - topic selection and requirement analysis defense. ppt
   4. The ID is two Arabic numerals (to be given later), and the ID less than 10 contains a leading 0. For materials not submitted according to the naming requirements, 5 points will be deducted from each group

**Part · 1 Blog essay (30%)**

**1.1 Blog Template**

The first line gives the blog link of the team leader, and this line has no other content except the link.  
1、 Team gathering (9 points)  
1.1 Introduce each team member's style, skills, programming interests, expected software engineering roles, one sentence declaration, etc., with unlimited content (2 points)  
1.2 Description of team characteristics: mainly describe the characteristics or core competitiveness different from all other teams (1 point)  
1.3 Logo of the team: design a logo with the characteristics of the team and post it on the essay (1 point)  
1.4 The first group photo of the team: with pictures and truth, the group photo style must be creative (5 points)  
2、 Start action (5 points)  
2.1 Summarize the content of the project your team will complete in one sentence, in both English and Chinese (2 points)  
2.2 Read Chapter 5 Team and Process, Chapter 17 People, Performance and Professional Ethics of the Construction Law, and please explain how your team intends to determine individual contribution points. (2 points)  
Students who are dissatisfied with the "individual contribution" rule and are difficult to discuss may consider "changing jobs" to other groups (find the receiving group and modify the team information on the online form)  
Reference: [FAQ of software engineering Q&A](https://www.cnblogs.com/ChildishChange/p/7554611.html)  
The PDF electronic version of the Construction Law has been uploaded to the course group files  
2.3 Please evaluate the contribution proportion of each member of the team to this assignment and fill in this question in a form. Please ensure that\*\* Σ Contribution ratio of each person=total number of people × 100% \* \* (1 point)  
It is forbidden to make the same score. If there is no evaluation, the team leader's score will be reduced by 50% after the average of the whole group  
3、 Drip Record (16 points)  
3.1 Draw the mind map and burnout map of the whole project (time range: from the first day of team creation to the submission time of this operation) (2+1 points)  
3.2 Draw UML according to the part of the project (8 points)  
Optional: use case diagram, class diagram, activity diagram, state diagram, entity relationship diagram  
     If there is duplication between parts or the UML diagram in the mandatory diagram is not applicable to a certain functional module, select other applicable UML diagrams by yourself  
UML diagram drawing reference link: [UML Reference 1](https://www.cnblogs.com/pat-chou-li/p/15483885.html), [UML Reference 2](https://www.cnblogs.com/Pollux-75/p/15473414.html), [UML Reference 3](https://www.cnblogs.com/smallgrape/p/15488626.html)  
Format example:

(x) Part XXXX

* Person in charge: x classmate
* Description:
* Problems faced by this part:
* Problems solved:
* XX design is applied to solve XX problem. One sentence description.
* Attachment: (All UML diagrams of this part)

3.3 Learning progress bar (added every week) (1 point)

| **Week N** | **New code (line)** | **Cumulative code (line)** | **Time spent on learning this week (hours)** | **Cumulative time spent on learning (hours)** | **Important growth** |
| --- | --- | --- | --- | --- | --- |
| 1 | 500 | 500 | 5 | 5 | Familiar with x language 1, 2, 3 features |
| 2 | 1000 | 1500 | 12 | 17 | Mastered the use of xxx by practicing xxx |
| … |  |  |  |  |  |

Two reference tools are given here：

* Excel table to MarkDown: [exceltk](https://www.cnblogs.com/math/p/exceltk.html)
* Form to Markdown online tool: [http://www.tablesgenerator.com/markdown\_tables](https://www.tablesgenerator.com/markdown_tables)

3.4 Experience (4 points)

* Selection of UML design tools, reasons for selection and evaluation of tools after use
* Difficulties encountered in this task and solutions (e.g.: difficulty description/what attempts have been made/whether they have been solved/what gains have been made)

4、 Video clip

* Here is a line of Bilibili video links

**1.2 Blog requirements**

1. When writing a blog, please select [**Switch to MarkDown**] in the upper right corner of the editing area, use MarkDown language to write blog documents, and write a blog strictly according to the first-level and second-level titles in the blog writing format;
2. Post a blog post after the assignment deadline: 20 points will be deducted from the original score if the assignment is submitted within 24 hours, 40 points will be deducted within 24-48 hours, 60 points will be deducted within 48-72 hours, and so on until 0 points is deducted;
3. Posting blog posts but not submitting tasks/wrong submission links: 10 points will be deducted for supplementary submission within 24 hours, 20 points will be deducted within 24-48 hours, 30 points will be deducted within 48-72 hours, and so on until 0 points are deducted (please note: this assignment will not remind the QQ course group of the need to submit tasks);
4. Missing submission: The above two points deduction rules are only applicable to the case of supplementary submission after the deadline of the assignment and before the start of the evaluation! The evaluation will be started at any time after the end of the assignment. The specific time of the evaluation will not be notified in advance. If the blog has not been published or the task has not been submitted at the beginning of the evaluation, it will be deemed as a lack of submission, and 0 points will be given;
5. Plagiarism or cheating: 0 points for dishonesty detected by an automatic evaluation system or manually (including but not limited to job plagiarism).

**Part · 2 Report documents (30%)**  
Scope and source of topic selection:

* Small projects that are creative, interesting, and original enough
* There are similar creative products in the market, but the projects can highlight certain differences and local advantages
* Refer to the actual application projects of the company, but the selected topic must have a specific application value
* Too simple team projects will be required to be reconceived

2.1 Topic Selection and Requirement Analysis Report

* Submit PDF version (twice), full score 20
* The following contents should be included

1) Project LOGO  
2) Background  
3) User portrait  
4) Requirement analysis (including "[NABCD model](https://blog.csdn.net/mei_363014743/article/details/79750071)")  
5) Competitive product analysis  
6) Mind mapping  
7) Class diagram  
8) Interface prototype  
9) Function description  
10) Acceptance verification criteria

* Reporting requirements

1) Refer to the [Software Requirements Specification (national standard)](https://www.docin.com/p-62846355.html) and write the software requirements specification of the corresponding project;  
2) In addition to meeting the requirements of the normative text in the form, the overall content must be carried out around the essence of the project to ensure that the project to be developed is as clear, complete, and accurate as possible;  
3) It is described in a hierarchical form. With the deepening of the "layer", the details of the description will be more specific;  
4) Use consistent graphical symbols and text to describe the content;  
5) All abbreviations must be defined in advance;  
6) Format:

* Directory required
* The word typesetting style is standard and beautiful, with pictures and texts
* There is a unified style throughout the document
* Pay attention to font, line spacing, image centering, etc;

7) Put yourself in the position of the reader - if the person who is unfamiliar with the software project can fully understand what the software should do by reading this document;  
8) Access the real users of the software project to ensure that the software truly reflects the needs of users and lays the foundation for the final availability of the software;  
9) For team collaboration and enhanced division of labor, it is necessary to describe the specific division of labor of each member and the proportion of workload in the whole document task;

2.2 On-site defense presentation

* Submit PPT presentation, full score 10
* PPT shall be graded according to its beauty, its compatibility with the theme, and its ability to express to the audience in a concise and comprehensive manner

**Part · 3 On-site defense (30%)**

1. Form: PPT defense of each group on the platform
2. Time: 18 minutes for each group, including 8 minutes for presentation, and 10 minutes for responding to questions and inquiries about topics and needs of each group (adjusted as the case may be).
3. Scoring method:

* (3.1) Oral defense performance
* (3.1.1) The PPT logic is reasonable and the layout is beautiful (full score: 5 points)
* (3.1.2) The defense process is smooth, and the content is reasonable and innovative (full score: 15 points)
* (3.2) Questioning session: Failing to answer the questions of the evaluation group/other groups/teachers or preparing to ask questions of other groups (including the situation that the answer is considered unqualified, 2 points will be deducted for each question until none is left) (full score: 10 points)

**Additional score:** In the defense phase, the group that has raised more valuable questions about the topics of other groups will be given a certain additional score (no more than 10 points).

**Part · 4 Video Introduction (10%)**

Please assume that the teacher, the evaluation group, and other students in the class are the investors. Please take a 1-2 minute video to introduce the team project, upload it to Bilibili, and give a video link at the end of the blog. Score according to the video content quality, with a score range of 5-10 points.