

CSE 535: Mobile Computing

Idea Paper Assignment

Purpose

This is a team assignment. In small teams, you will collaboratively develop a unique solution to an existing mobile computing problem. The Idea Paper should examine a complex problem and your team's five-year plan to solve the problem.

Objectives

At the completion of this team assignment, learners should be able to:

- Identify an existing mobile computing problem.
- Collaborate with a team to propose a solution.
- Curate relevant research resources and reference materials.
- Analyze previous research papers for similar solutions.
- Develop a five-year plan to solve a complex problem.
- Explain the team's approach to solving the problem.
- Compare and contrast how the team's approach is different from previous solutions.
- Apply professional writing in a typed report.
- Ask probing and clarifying questions to gain specific feedback from the course team.
- Evaluate peer contributions across the team assignment.

Technology Requirements

- Word processing program

Instructions

Work in teams to write a paper that outlines a mobile computing problem and detail a unique solution. This project has a total of three (3) required deliverables. Of these, there are two (2) team

deliverables and one (1) individual deliverable. It is recommended to participate in the optional peer review to receive (and provide) feedback on a draft of the Idea Paper.

Team Formation

The Idea Paper **cannot** be completed individually. Review the assignment information in the *Welcome and Start Here* section of your course for team formation details.

You will be responsible for working with your team to complete the assignment. It is best to reach out to your team early and communicate with your teammates often.

Team Charter

Submit a charter that outlines the roles and responsibilities for each team member, how team member deliverables will be handled, and how conflicts will be addressed.

The charter should be one (1) page long. Include each of these four (4) sections:

1. Roles and responsibilities
2. Team submitter (who will submit items for grading)
3. Team deliverables
4. Contingency plan in case a team member does not complete their work

Please make sure to include the names of all team members at the top of your document.

The Team Charter is a team submission: only one (1) team member must submit it to the submission space found at the end of the module in which it is due. The team charter is graded and will give team members a chance to begin collaborating. The course team reviews the submission and assigns a grade based on whether the charter includes the all four (4) required sections.

Optional: Draft Peer Review

This submission is not required and is not graded. It is an opportunity for you to receive feedback from your peers.

If desired, one (1) member of your team may submit a draft of your paper for peer review. You do not need to submit the whole paper; if you choose, you may submit only a portion of it for review.

This optional peer review is ungraded. Feedback is given by your peers who also submit their Idea Paper for review. If you participate, make sure to offer your own feedback on your peers' work

Idea Paper

In your team paper, tackle a complex problem and propose a five-year plan to execute a solution. To determine whether the idea is unique, each team must read **at least 5-10 papers** in the domain of research. Evaluate how the idea is different from what is discussed in the research papers you read.

Address these aspects of the problem and solution:

- Significance
- Relevance
- Novelty
- Soundness
- Feasibility

Specifically, your team paper should answer these questions:

1. Why do we need to solve this problem?
2. Why is it related to Mobile Computing?
3. Why is the solution new?
4. Is the solution described technically sound?
5. Why will this solution take 5 years to complete?

Your submission must follow these guidelines:

- **Maximum length:** Four (4) pages
- **Required format:** Use the **SigChi** format provided in the **Document-Formats.zip** file, which is available in the "Assignment Overview and Resources" page in the *Welcome and Start Here* section of your course.
 - *Failure to use this format will result in a **zero (0)** grade for the paper.*

The Idea Paper is a team submission: only one (1) team member must submit it in the submission space found at the end of the module it is due. This paper is graded. The course team reviews the submission and assigns a grade based on the Idea Paper Rubric.

Teammate Review

Individually rate your teammates' performances based on each member's Participation, Communication, and Contribution. Your answers will remain confidential.

Review the assignment information in the *Welcome and Start Here* section of your course for teammate review details.

The Teammate Review is a **required** individual submission. All teammate reviews are checked by the course team.

Submission Directions

You are given a limited number of attempts to submit your best work. The number of attempts is given to anticipate any submission errors you may have in regards to properly submitting your best work within the deadline (e.g., accidentally submitting the wrong paper). It is not meant for you to receive multiple rounds of feedback and then one (1) final submission. Only your most recent submission will be assessed.

Submitting the Idea Paper Assignment Team Charter

You must submit your Idea Paper Assignment Team Charter deliverable in the designated submission space in the course. Learners may not email or use other means to submit any project for review, including feedback, and grading.

The Idea Paper Assignment Team Charter submission includes **one (1)** team deliverable:

1. **Team Charter:** Your Idea Paper Team Charter must be a single PDF with the correct naming convention: *Team Name_Team Charter*.

Submitting the Idea Paper Assignment

You must submit your Idea Paper Assignment deliverable in the designated submission space in the course. Learners may not email or use other means to submit any project for review, including feedback, and grading.

The Idea Paper Assignment Team Charter submission includes **one (1)** team deliverable:

1. **Idea Paper:** Your Idea Paper must be a single PDF with the correct naming convention: *Team Name_Idea Paper*.

Evaluation

Please review the rubrics for how your Team Charter and Idea Paper will be graded. Submissions will be evaluated based on each criterion and will receive a total score.

Submissions missing any part of the project will be graded based on what was submitted against the rubric criteria. Missing parts submitted after the deadline will **not** be graded.

Review the course syllabus for details regarding late penalties.

Rubrics

Team Charter Rubric

Criteria	Meets criteria ("Yes")	Does not meet criteria ("No")
Does the charter include a section about the roles and responsibilities of the team members?	1 pt	0 pts
Does the charter identify the team submitter (the one who will submit items for grading)?	1 pt	0 pts
Does the charter include a section for the team deliverables?	1 pt	0 pts
Does the charter include a section for a contingency plan in case a team member does not complete their work?	1 pt	0 pts

Idea Paper Rubric

*Failure to use the required format (SigChi) will result in a **zero (0)** grade for the paper.*

Criteria	Points				
Significance: Why do we need to solve this problem?	5.0pts Full Marks	4.0pts Good points in favor of significance, but you did not address a point highlighted in the comments	3.0pts Made some good points, but not evident that if we solve this problem then there will be a huge financial, health, or technical improvement.	2.0pts Did not understand why we need to solve the problem.	0 pts No Marks Plagiarism

Relevancy: Why is it related to Mobile Computing?	5.0pts Full Marks	4.0pts Good points in favor of relevance, but you did not address a point highlighted in the comments	3.0pts This problem seems relevant but the rest of the paper is not related to Mobile Computing.	2.0pts Not relevant to Mobile Computing at all.	0 pts No Marks Plagiarism
Novelty: Why is the solution new?	5.0pts Full Marks	4.0pts Good points in favor of novelty, but you did not address a point highlighted in the comments	3.0pts The problem seems novel but the authors do not agree about it and have missed several novel aspects.	2.0pts Not novel. There exist several works like this.	0 pts No Marks Plagiarism
Soundness of Solution: The solution described is technically sound.	5.0pts Full Marks	4.0pts Good points in favor of soundness, but you did not address a point highlighted in the comments	3.0pts The techniques discussed are good but the authors do not understand them or at least wrote something that confuses the reader.	2.0pts The techniques discussed are irrelevant to the problem and may not work.	0 pts No Marks Plagiarism
Feasibility: Why will this solution take 5 years to complete?	5.0pts Full Marks	4.0pts Good points in favor of feasibility, but you did not address a point highlighted in the comments	3.0pts It is apparent that this solution will take many years to achieve but the authors did not argue about them in the paper.	2.0pts The solution can be achieved in less than 5 years.	0 pts No Marks Plagiarism