## Challenge Report (Graded out of 20)

	Exemplary 4	Proficient 3	Marginal 2	Unacceptable 1
Q1. Description of Assumptions	The description of the assumptions is clear and detailed.	The description of the assumptions is mostly clear and detailed.	The description of the assumptions is somewhat unclear and lacking details.	The description of the assumptions is unclear and lacking details.
Q2. Rationale Behind Assumptions	The rationale behind the assumptions is supported by concrete evidence, e.g., gathered from user interviews or reading (with citation). The description of the rationale is clear and detailed.	The rationale behind the assumptions is supported by concrete evidence, e.g., gathered from user interviews or reading (with citation). The description of the rationale is mostly clear and detailed.	The rationale behind the assumptions is lacking support by concrete evidence, e.g., gathered from user interviews or reading (with citation). The description of the rationale is somewhat unclear and lacking details.	The rationale behind the assumptions is lacking support by concrete evidence, e.g., gathered from user interviews or reading (with citation). The description of the rationale is unclear and lacking details.
Q3. Challenging Assumptions	The team has challenged all of their assumptions substantially through both internal activities (i.e., reflecting on their design) and external activities (i.e., taking concrete steps to ask probing questions during user interviews, or seek feedback from third parties about their designs).	The team has challenged some of their assumptions adequately through both internal activities (i.e., reflecting on their design) and external activities (i.e., taking concrete steps to ask probing questions during user interviews, or seek feedback from third parties about their designs).	The team has challenged some of their assumptions adequately through internal activities (i.e., reflecting on their design) OR external activities (i.e., taking concrete steps to ask probing questions during user interviews, or seek feedback from third parties about their designs), but not both.	The team has challenged some of their assumptions, but not through internal activities (i.e., reflecting on their design) OR external activities (i.e., taking concrete steps to ask probing questions during user interviews, or seek feedback from third parties about their designs).
Q4. Insights and Findings	The insights and findings are well articulated and novel (i.e., taught the team something new; provided new information towards improving the understanding of the problem or the design of the solution).	The insights and findings are novel (i.e., taught the team something new; provided new information towards improving the understanding of the problem or the design of the solution), but not well articulated.	The insights and findings are well articulated, but trivial (i.e., do not provide new information towards improving the understanding of the problem or the design of the solution).	The insights and findings are not well articulated and are trivial (i.e., do not provide new information towards improving the understanding of the problem or the design of the solution).
Q5. New Assumptions and Future Plans	The new assumptions follow logically from the insights and findings. The future plans contain concrete and actionable steps.	The new assumptions mostly follow logically from the insights and findings. The future plans contain concrete and actionable steps.	A few of the new assumptions do not follow logically from the insights and findings. The future plans contain vague suggestions, and not concrete and actionable steps.	Many of the new assumptions do not follow logically at all from the insights and findings. The future plans contain vague suggestions, and not concrete and actionable steps.

# Final Prototype (Graded out of 12)

	Exemplary 4	Proficient 3	Marginal 2	Unacceptable 1
<b>Fit to Problem</b> Completeness and Appropriateness of the Features for the Problem	The prototype solution addresses the problem perfectly. It provides features that address multiple aspects of the problem, and the solution is highly likely to solve the problem for each of the stakeholders or users of the system.	The prototype solution addresses the problem well, but there are a few (e.g., 1) aspects of the problem that the prototype solution failed to address adequately. The solution is likely to solve the problem for multiple stakeholders or users of the system.	The prototype solution addresses the problem well, but there are many (2-3) aspects of the problem that the prototype solution failed to address adequately. The solution is unlikely to solve the problem for multiple stakeholders or users of the system.	The prototype solution does not address the problem well at all. There are many (4+) aspects of the problem that the prototype solution failed to address adequately. The solution is unlikely to solve the problem for multiple stakeholders or users of the system.
<b>Usability</b> Workflow, Information Architecture, Terminologies, Clarity of Navigation Structure	The prototype has no usability issues. The workflow is intuitive, self-explanatory, and error tolerant. Labels/terminologies are clear, consistent and self-explanatory. There is no component of the system that may cause confusion for the users.	The prototype mostly has no usability issues. There are a few (e.g., 1-2) problems with workflow, labels/terminologies and other components of the system that may cause confusion for the users.	The prototype has substantial usability issues. There are quite a few problems (3+) with workflow, labels/terminologies and other components of the system that may cause confusion for the users.	The prototype is completely unusable. There are a large number of problems (5+) with workflow, labels/terminologies and other components of the system that may cause confusion for the users.
<b>Visual Design</b> Colors, Fonts, Graphics, Logo, Layout; Aesthetics Appropriate for the Problem and Audience	The visual design is extremely inviting, appealing and appropriate for the purpose of the application. The visual design is consistent across pages.	The visual design is somewhat inviting, appealing and appropriate for the purpose of the application. The visual design is mostly consistent across pages.	The visual design is lacking, in terms of being inviting, appealing or appropriate for the purpose of the application. There are a few inconsistencies in the visual design across pages.	The visual design is not inviting, appealing or appropriate for the purpose of the application. There are many inconsistencies in the visual design across pages.

## **Demo Video** (Graded out of 12)

	Exemplary 4	Proficient 3	Marginal 2	Unacceptable 1
Motivation Compelling statement of the problem	The problem is well explained (very clear and explicit) and well motivated (backed with concrete evidence), and the argument is compelling/convincing.	The problem is somewhat well explained (clear and explicit) and well motivated (backed with concrete evidence), and the argument is somewhat compelling/convincing.	The problem is only marginally well explained (unclear or vague) and well motivated (backed with concrete evidence), and the argument is somewhat compelling/convincing.	The problem description is severely lacking, either because it is not well explained (very unclear or vague), not well motivated (backed with concrete evidence), or because the argument is not compelling/convincing.
<b>Prototype Demo</b> Clear description of the key features	It is perfectly clear what the key features of the prototype are, and that the features can adequately address the problem at hand.	It is somewhat clear what the key features of the prototype are, and that the features can adequately address the problem at hand.	It is somewhat clear what the key features of the prototype are, but it is unclear as to how the features can adequately address the problem at hand.	It is unclear what the key features of the prototype are, and how the features can adequately address the problem at hand.
<b>Delivery</b> Adequate volume/energy, appropriate pace, diction, enthusiasm/energy, effective use of visual aids	Good volume and energy; proper pace and diction; visual aids used effectively; overall delivery is very polished	Adequate volume and energy; generally good pace and diction; visual aids used adequately; overall delivery is mostly polished	More volume/energy needed at times; pace too slow or fast; visual aids used poorly; overall delivery is a little hesitant	Low volume or energy; pace too slow or fast; poor diction; visual aids very poorly used; overall delivery is very hesitant

#### Presentation (Graded out of 20)

	Exemplary 4	Proficient 3	Marginal 2	Unacceptable 1
<b>Content</b> Level of detail, depth, appropriate length, adequate background of information	Presentation provides excellent depth and detail; all needed details included; all ideas are well developed; presentation is within specified length	Presentation provides good depth and detail; all needed details included; most ideas are well developed; presentation is within specified length	Presentation provides adequate depth; few needed details are omitted; major ideas adequately developed; presentation is within specified length	Presentation provides little depth; many needed details are omitted; major ideas not/barely developed; presentation is too long/short
<b>Organization/Clarity</b> Appropriate introduction, body, and conclusions; logical ordering of ideas; transitions between major points	Ideas are presented in logical order with effective transitions between major ideas; presentation is clear and concise	Most ideas are in logical order with adequate transitions between most major ideas; presentation is generally clear and understandable	Some ideas not presented in proper order; transitions are needed between some ideas; some parts of presentation may be wordy or unclear	Ideas are not presented in proper order; transitions are lacking between major ideas; several parts of presentation are wordy or unclear
<b>Documentation</b> Proper support and sourcing for major ideas, inclusion of visual aids that support message	Effective message support provided in the form of facts and visual aids; sourcing is current, credible, relevant and well used for major ideas ; visual aids are clear and well used	Adequate message support provided for key concepts by facts and visual aids; sourcing is generally adequate, credible and relevant; visual aids are clear	Some message support provided by facts and visual aids; some sourcing may be irrelevant, not credible or thin, visual aids are a little confusing	Little message support provided by facts and visual aids; inadequate sourcing/sourcing is mostly irrelevant and not credible; visual aids are confusing
<b>Delivery</b> Adequate volume, appropriate pace, diction, personal appearance, enthusiasm/energy, posture, effective use of visual aids	Good volume and energy; proper pace and diction; avoidance of distracting gestures; professional appearance; visual aids used effectively; overall delivery is very polished	Adequate volume and energy; generally good pace and diction; few or no distracting gestures; professional appearance; visual aids used adequately; overall delivery is mostly polished	More volume/energy needed at times; pace too slow or fast; some distracting gestures or posture; adequate appearance; visual aids; overall delivery is a little hesitant	Low volume or energy; pace too slow or fast; poor diction; distracting gestures or posture; unprofessional appearance; visual aids poorly used; overall delivery is very hesitant
Interactions ability to listen and/or answer questions	Excellent listening skills (e.g., near perfect understanding of the questions and only seeked meaningful clarification); answers audience questions with confidence and accuracy	Displays ability to listen (e.g., understood most of the questions and seeked clarification when necessary); provides adequate answers to audience questions	Better listening skills needed (e.g., misunderstood parts of the questions, did not seek clarification); some difficulty answering audience questions	Poor listening skills (e.g., did not understand the questions at all, did not seek clarification); uneasiness or inability to answer audience questions

Based on: https://www.purdue.edu/science/Current\_Students/curriculum\_and\_degree\_requirements/oral\_rubrics\_gray.pdf

# **Design Portfolio** (Graded out of 20)

	Exemplary 4	Proficient 3	Marginal 2	Unacceptable 1
Compelling problem statement	Provide a convincing argument, backed by substantial evidence that the problem is important and worth addressing.	Provide a somewhat convincing argument, backed by some evidence that the problem is important and worth addressing.	Provide a somewhat convincing argument, but provide no concrete evidence that the problem is important and worth addressing.	Provide no argument, with no concrete evidence to support the fact that the problem is important and worth addressing.
Documentation of Design Process	Excellent use of visual aids (e.g., images of artifacts) to explain the design process. The description of the design activities demonstrate full understanding of the purpose of the design activities.	Good use of visual aids (e.g., images of artifacts) to explain the design process. The description of the design activities demonstrate adequate understanding of the purpose of the design activities.	Poor use of visual aids (e.g., images of artifacts) to explain the design process. The description of the design activities demonstrate marginal understanding of the purpose of the design activities, with a few misunderstandings.	No use of visual aids (e.g., images of artifacts) to explain the design process. The description of the design activities demonstrate poor understanding of the purpose of the design activities, with many misunderstandings.
Quality of the Design Artifacts Qualities of Persona, Empathy Maps, Paper prototypes, High- Fidelity prototypes	Design activities were perfectly executed, producing high quality design artifacts.	Design activities were mostly well executed, producing good quality design artifacts. However, a few (e.g., 1) of the design artifacts can be further improved.	Design activities were not always well executed, producing marginally acceptable quality design artifacts. However, a number (2-3) of design artifacts can be further improved.	Design activities were not always well executed, producing poor quality design artifacts. A large number (4+) of design artifacts can be further improved.
Use of Interviews and Feedback to Inform Iterative Design	Excellent insights (surprising, non-obvious) were drawn from user interviews, and applied to iteratively modify the prototype design throughout the design process.	Good insights (although not always surprising or non- obvious) were drawn from user interviews, and applied to iteratively modify the prototype design throughout the design process.	Good insights (although not always surprising or non- obvious) were drawn from user interviews, but not applied to iteratively modify the prototype design throughout the design process.	Only a few insights (not too surprising or non-obvious) were drawn from user interviews, but not applied to iteratively modify the prototype design throughout the design process.

### CS649 Research Report (Graded out of 16)

	Exemplary 4	Proficient 3	Marginal 2	Unacceptable 1
Introduction & Related Work	The problem is well-motivated, with a substantial amount of concrete evidence for why the problem is interesting and worth studying. The related work section is comprehensive and covers a substantial number of prior work properly grouped into themes, and explains how the proposed research studies extend these prior work.	The problem is somewhat well- motivated, with some concrete evidence for why the problem is interesting and worth studying. The related work section has good coverage, and covers an adequate number of prior work properly grouped into themes, but does not explain how the proposed research studies extend these prior work.	The problem is only marginally well-motivated, with only a few concrete evidence for why the problem is interesting and worth studying. The related work section is missing some key aspects of the problem, and covers only a small number of prior work, not always properly grouped into themes and does not explain how the proposed research studies extend these prior work.	The problem is not well- motivated at all, lacking any concrete evidence for why the problem is interesting and worth studying. The related work section is missing many key aspects of the problem, and covers only a small number of prior work, not properly grouped into themes and does not explain how the proposed research studies extend these prior work
Research Questions	The research questions/hypotheses are novel, clearly stated and its significance to HCI research, if answered, is clearly explained.	The research questions/hypotheses are somewhat novel, somewhat clearly stated and its significance to HCI research, if answered, is somewhat clearly explained.	The research questions/hypotheses are not novel, and their description is somewhat unclear. The significance to HCI research, if answered, is not explained clearly.	The research questions/hypotheses are not novel, and their description is very unclear. The significance to HCI research, if answered, is not explained at all.
System Description	The components/features of the system are explained clearly. The rationale behind the design is explained clearly. Visual aids are effectively used to support the system description.	The components/features of the system are explained somewhat clearly. The rationale behind the design is explained somewhat clearly. Visual aids are somewhat effectively used to support the system description.	The components/features of the system are explained, but not clearly. The rationale behind the design is explained, but not clearly. Visual aids are not effectively used to support the system description.	The components/features of the system are not clearly explained at all. The rationale behind the design is not clearly explained at all. Visual aids are not used at all to support the system description.
Study Design	The chosen methodologies are appropriate for the research question and clearly explained. The study designs are perfect.	The chosen methodologies are appropriate for the research question and explained somewhat clearly. But the study designs are lacking in a few (1-2) ways.	Some of the chosen methodologies are not appropriate for the research question and explained, but not clearly. But the study designs are lacking in multiple ways (3+) ways.	Many of the chosen methodologies are not appropriate for the research question and are not explained clearly at all. The study designs are lacking in a substantial number of ways (4+) ways.