### **CSSE 371: Software Requirements Engineering**

# Project Milestone M1: Preparation for Reverse Shark Tank Due: 8:55 AM September 17<sup>th</sup>, M1 Drop Box in Moodle

# Introduction

The main purpose of this milestone is to produce a product vision document that will help you prepare for Reverse Shark Tank (project pitch). In Milestone 0, you provided a preliminary information about your startup idea. In this milestone, you will perform a more detailed analysis of your idea before pitching it to your prospective project partners. The idea is to attract them to work with you in the project. A project that can garner enough interest has higher chance of moving forward. Your instructor will make the final decision about the projects.

#### Contents of the Product Vision Document

Your product vision document which must have the following contents (use the Week 1 Day 1-3 workbook format where applicable):

- 1. A tile page that includes Project title and name(s) of student(s) proposing the project.
- 2. Introduction An improved Milestone 0 narrative (make it concise and directed).
- 3. List of stakeholders.
- 4. Usage scenario List a few key usage scenarios (two or more) for your startup idea. Identify how different stakeholder will use your product in the scenarios.
- 5. Problem Identification and Prioritization You must talk with a few of the listed stakeholders to identify and verify the problems relevant to your startup idea. Also document who you interviewed in the process.
- 6. Root Cause Analysis Choose the most important problem in your prioritized list and perform a root cause analysis. Summarize your root cause analysis in a few sentences by reasoning why a software solution is indeed necessary for this problem.
- 7. Context Diagram Draw the context diagram of your system.
- 8. Constraints Identify all of the constraints in your system utilizing the context diagram.
- 9. Propose a list of features relevant to your startup. Each feature must have the following attributes: Feature description, Reason, Value, Priority, Effort, and Risk.
- 10. Problem to Feature Mapping Map your problems to the proposed features. In a few sentences, reason about dead features, unsolved problems, which features offer best opportunity for earliest first release, and which ones are complex and need careful planning.
- 11. Alternative Solution Identify and list your potential competitions and reason how you are different.
- 12. List your value proposition for both end users and other stakeholders.
- 13. Identify all of the risks that are involved with your startup using a fishbone diagram. Basically, identify what causes may lead to the failure of your startup.
- 14. An elevator statement directed to recruit a few project partners.

# Reverse Shark Tank Presentation (Startup Pitch)

The Reverse Shark Tank presentations will happen on Day 3 of Week 2. You have 3 minutes to deliver your presentation and two minutes for any follow up question-answers. The entire

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class will rank your idea in a scale of 5 (best) to 1 (worst). This will serve as a data point for your instructor to make decisions about the proposed projects.

You are allowed to use any props including power-point during the presentations. Break you presentation into several topics and estimate the time you are spending on each topic (use seconds). Practice a few times before the presentation day. All of the founders must be involved in the delivery of the presentation.

As an appendix to the product vision document, provide your presentation plan (list of topics and estimated time for each topics in seconds).

# **Grading Rubric**

- 1. Tile page (2 points)
- 2. Introduction (3 points)
- 3. List of stakeholders. (5 points)
- 4. Usage scenarios (5 points)
- 5. Problem Identification and Prioritization (10 points)
- 6. Root Cause Analysis (5 points)
- 7. Context Diagram (10 points)
- 8. Constraints (10 points)
- 9. Feature List (10 points)
- 10. Problem to Feature Mapping (5 points)
- 11. Alternative Solution (5 points)
- 12. Value Proposition (5 points)
- 13. Risk Identification (10 points)
- 14. An elevator statement (10 points)
- 15. Appendix Reverse Shark Tank Presentation Plan (5 points)

### **Submission:**

Please turn in a .pdf file to the M1 drop box in Moodle by 8:55 AM on Thursday, September 17<sup>th</sup>.