

CraftVerify

Team Wanderer

<https://github.com/JPJ-5/Senior-Project>

Team Members:

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Version	Description	Date
1.0	First Draft of Project Planning	11/15/2023

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Project Risks:

The project risks are documented in the risk management table. Each risk will be assigned the following attributes:

- Threat Level: describes the impacts of the risk.
 - Low: the impact of the risk is minimal and can be easily managed.
 - Medium: the risk might negatively affect performance, but won't stop progress.
 - High: the risk would result in an un-shippable product if not addressed by a migration plan and management plan.
- Likelihood of Event: Corresponds with how likely the risk is.
 - Unlikely: The chances of it happening is below 50%. Usually will be more around the 30% range of actually happening
 - Likely: The chances of it happening is above 50%. These types of risks are more important to take care of as they will probably happen during the actual execution of our project plan. Likely events will tend to be around 60%.
 - Very Likely: The chances of it happening is around 80%. Every member should be prepared to account for it at any point as it will most likely occur during the project.
- Tolerance Level: Quantifiable metric (hours) specifying the amount of buffer allocated to the risk.
- Mitigation Plan: Details plans to prevent the risk from happening.
- Management Plan: Explains how risk will be reduced if it occurs.

The project risks are first organized by the top three most important risks to assess. This is important as these risks either have a high threat level and will need a plan to properly assess or the risk has a likelihood of very likely so it needs to be assessed first since these are almost guaranteed to happen during the project.

Top 3 Risks:

Risk	Threat Level	Likelihood of Event	Tolerance Level (Hours)	Migration Plan	Management Plan
Teammates being sick and other unplanned absences	Medium	Very Likely	10-12 hours	Reporting these unplanned absences as soon as possible so we have time to reassign assignments if needed. The sprint intervals are also flexible enough to allow for other team members to pick up the slack as long as it is not beyond our tolerance range.	In the case that an unplanned absence does occur without any notice such as a hospital emergency, all non-absent team members will meet together to redefine internal deadlines and reassign assignments.
Hardware Equipment Failure	High	Unlikely	10-12 hours	Our team will avoid common causes of equipment failure such as overcharging, placing liquids near the hardware. In addition, we will update the operating system when needed.	In the case that hardware failure does occur, we will use backup devices that we own.
Changes in user and functional requirements	High	Likely	10-12 hours	Our team will build the components with abstraction to allow for easier replacements based on any new user and/or functional requirement.	In the case a law, regulation, user and/or functional requirement does change, the abstraction that is built into each component should make it easy to replace the components that

					need to be changed in order to fit the new requirements.
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Other risks to address:

Risk	Threat Level	Likelihood of Event	Tolerance Level (Hours)	Migration Plan	Management Plan
Technology Stack Failure	High	Unlikely	10-12 hours	Beyond the idea of just sticking to the tech stack given by our client which would minimize this risk, if we need to add something to the tech stack, we will prioritize using components that are commonly used and well-known.	In the case that the technology infrastructure does fail, we will figure out the source of failure and we will research and switch to a more ideal technology.
Dependency Failure	High	Unlikely	10-12 hours	To avoid dependency failures, our team will examine our libraries before usage to ensure compatibility with one another. Also, to avoid this failure our team will also build an abstraction around the library for easier replacement	In the case that a dependency does fail, we will remove the incompatible library and be able to replace the library with a more efficient one by utilizing the abstraction we built into the program.
Late Deliverables	High	Unlikely	10-12 hours	Our team will follow the project timeline with recurring meetings	In the case that a late deliverable does occur, our team will reassess

				to track progress and milestones giving definite due dates. Our project plan also accounts for risks that might affect our deliverable.	deadlines and make a detailed plan to still reach the end goal.
Failure to manage time	High	Unlikely	10-12 hours	During sprint standups, each team member will account for what they did and track the progress of their assigned assignments. We will track the time of each member on a burndown chart which can be used to detect if a member is too far behind the predicted/expected burndown	This differs from late deliverables as this is when this problem is caught before the due date. In the case that a team member fails to manage time for their assignment, we will first see if another team member has enough free time to assist with the team member who is falling behind. If not we will consider reassessing the deadlines and make a detailed plan to still reach the end goal similar to a late deliverable.
Losing Team Members	High	Likely	10-12 hours	Our project plan accounts for a reduced capacity at the end of the project schedule.	In the case that we do lose team members, we will follow the schedule of our reduced capacity project plan.
Going over budget	Medium	Unlikely	5-8 hours	We will ensure all of the software	If we do use software that

				being used uses a free license.	requires paying, we will divide the cost between all team members.
Changes to client schedule/dead lines	Medium	Unlikely	5-8 hours	Our team will plan for 3-5 days of room in the project schedule for deadlines to be moved up	Re-evaluate work item priorities to adhere to feature deadline changes Perform backlog grooming to help reflect this change.
Gaining Team Members	Medium	Unlikely	5-8 hours	Our team's project has many features that were de-scoped from the first draft of the BRD that can be used for a new team member.	In the case that we do gain another team member, we will have to re-evaluate our initial scope to expand it in order to account for our increased manpower. This will require us to also reevaluate our project schedule and plan in order to account for the work of any new team member.
Requirements Creep	Low	Unlikely	>4 hours	Conduct Stand-ups two times a week to monitor progress. Adhering to the scope defined in the project proposal will help prevent scope creep. Finally, reviewing the project monthly will help notice	In the case that undetected requirement creep would occur, we will re-evaluate our initial scope and expand or reduce the scope as necessary.

				undetected scope creep to prevent requirement creep.	
Jason's Planned absence overseas during Winter Break	Low	Very Likely	>4 hours	The schedule as defined in the Gantt chart already accounts for this planned absence. This risk only becomes a real issue if the schedule defined in the Gantt chart has to be changed in order to fit a new feature or requirement.	If we do however change our planned schedule as defined on our Gantt chart to start work during the winter break, the plan will have to lessen the workload for Jason especially since he will be overseas, so he would only be active during the time where the rest of the time is asleep limiting communications between him and the rest of the team during this time.

Project Statistics

Number of weeks: 19.5

Number of Sprints: 7 (sprint 5-11)

- Sprint 5: 11/9 - 11/22
- Sprint 6: 11/23 - 12/11
- Sprint 7: 1/23 - 2/12
- Sprint 8: 2/13 - 3/4
- Sprint 9: 3/5 - 3/25
- Sprint 10: 3/26 - 4/15
- Sprint 11: 4/16 - 5/6

Milestones

- Milestone 1 due 11/22
- Milestone 2 due 12/11

Team Capacity

- Team Members: 7

Member	Jason	Joshua	Parth	Steven	Shane	Khuong	An
Hours	8	8	8	6	8	8	8

- Weekly Capacity: 54 Hours
- Total tolerance: 15% tolerance = ± 8.1 hours weekly
- Total hours: 1,053 Hours

Timeline

The CraftVerify product is planned to end May 6, 2023. The project schedule follows the CSULB fall and spring semesters including winter break, yet excluding spring break. Full detailed breakdown will be available in our gantt chart. Gantt chart will be included in the pdfs attached, but below is a roadmap with an overview of each sprint and its tasks.

Sem	Tasks	Nov				Dec				Jan				Feb				Mar				Apr				May			
1	HLD Project Plan Data Access Logging BRD	Milestone 1/ Sprint 5 11/10 - 11/22																											
1	Security Network diag User library				Milestone 2/ Sprint 6 11/23 - 12/11																								
2	Authentication Seller Dashboard Item Creation										Sprint 7 1/23 - 2/12																		
2	Authorization Search Engine Shopping cart												Sprint 8 2/13 - 3/4																
2	Product Bidding Wishlist User Registration User Modification														Sprint 9 3/5 - 3/25														
2	Price Sorting Rating system User Deletion																Sprint 10: 3/26 - 4/15												

Features

Work Item	Team Member
Item Listing + offering system	Joshua
Wishlist functionality	Shane
Shopping cart	Steven
Price range sorting	Joshua
Search engine	Jason
Report, Rating and Review System	Parth
Item Auction/ Product Bidding	An
Seller Dynamic Dashboard	Khuong