**Project Overview:**

**The purpose of this report is to provide the status of all tasks throughout the project lifecycle. The report includes the following:**

* **Project Overview**
* **Project Outcomes throughout the project lifecycle**
* **Challenges and Issues encountered throughout the project lifecycle**
* **Ongoing Risks throughout the project**
* **Milestone III Key Accomplishments throughout the project lifecycle**
* **Project key deliverables associated with each task assigned**
* **Status updates throughout the project**

**The start date for milestone two started on February 24, 2024. The first task was the initial kickoff meeting to brainstorm and discuss tasks which will need to be accomplished for the NetLogo prototype deliverable.**

**The final deliverable will be the presentation of the capstone along with the demonstration of the prototype NetLogo prototype.**

**Outcome I Milestone III:**

**Reviewed several error messages in code based upon attributes for NetLogo**

* **Conducted a thorough review of code, had to rollback instance in order for the data model to work**

**Outcome II Milestone III:**

**Milestone III encountered scope creep throughout the last phase of the project due to the following reasons:**

* **Due to inclement weather**
* **Availability of personnel**
* **Learning curve for prototype to be delivered as the final project**
* **Understanding key objectives and requirements for milestone III**
  + **Conducted several meetings to obtain status updates to discuss challenges and risks to the project**
  + **The meetings provided valuable insight on which tasks will require extensive research in order to complete the work required before the upcoming deadline**
  + **The research conducted provided value to ensure the success of both the prototype and graduate research paper for the final deliverable**

**Project Issues and Challenges: Milestone III:**

**Challenge: Availability of project personnel (work, personnel issues, test environment, etc.**

* **Solution: Team was able to meet outside of meeting to discuss tasks and milestone updates**
* **Challenge: Understanding the data elements which would need to be fed into the NetLogo application**
* **Solution: Team was able to discuss different data types, data elements and variables to feed into the NetLogo Model**
* **Challenges: Brainstorming on how to put together the project outline**
* **Solution: Will work together as a team to provide inputs and help build the project outline**
* **Challenges: Understanding key elements to the Graduate Paper for final deliverable**
* **Solution: Reworking key elements to the Graduate Paper to present as a final deliverable for the project**
* **Challenges: Understanding how to add GIS extension to prototype**
  + **Extension would cause degradation of the visualization to NetLogo model**
* **Challenges: Making changes to global settings the configuration environment caused erroneous test results**
* **Solution: Will continue to streamline and work on process improvement for the environmental display. May need to perform a rollback to previous display settings in the global environment**
* **Challenge: Providing input for all key deliverable from all members of the team as a final deliverable for the project. This includes the Graduate Research Paper**
* **Solution: All members of the team will need to do their fair share of work to ensure all key deliverables are met for the final project.**

**Ongoing Risks for Milestone III:**

* **Project Scope Creep: Some assigned tasks currently have been moved to the left**
  + **Due to members on the team having other personal commitments, (.i.e., family issues, personal issues, place of employment), etc.** 
    - **Update to Milestone III: On going issues continue to move project to the left (personal commitments, place of employment, family issues, etc.)**
* **NetLogo Data Modeling Diagram will need to be developed (no status update)**
* **Visualization and display of data for use in the Environmental Setup will need to be developed (completed 3/9/2025).**
* **Time and availability of personnel conducting testing for the deliverable**
* **Environmental factors which affected the project.**
  + **On March 4, 2025, a blizzard affected the Nebraska regional area**
    - **This weather event produced widespread power outages**
    - **April 17, severe weather event which produced several tornadoes and damaging winds in the local area.**
    - **April 22, a severe weather event which produced baseball size hail, damaging winds and tornadoes in the local area. Several power outages were reported in the local and regional area.**
    - **April 28, severe weather outbreak in the local area producing baseball size hail, damaging winds and tornadoes. Several power outages were reported in the local and regional area. Team meeting was moved to virtual.**

**Milestone III Key Accomplishments:**

* **Prioritization Report Completed**
* **Completion of Graduate Paper for Milestone III**
* **Completion of Prototype as a final deliverable for Milestone III**

**The start date for milestone two started on February 24, 2024. The first task was the initial kickoff meeting. The purpose of the meeting was to brainstorm and discuss tasks which will need to be accomplished for NetLogo prototype deliverable.**

**The final deliverable will be the presentation of the capstone along with the demonstration of the prototype NetLogo prototype. The final presentation for the project will be conducted on May 12, 2025 at 17:00 pm.**

**Project Key Deliverables:**

**Project key deliverables associated with each task assigned and status updates:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name:** | **Description** | **Start Date:** | **End Date:** | **Status:** |
| **Sheryl Cummings** | **Milestone III working on Prioritization Report** | **4/6/2025** | **5/8/2025** | **Completed** |
| **Sheryl Cummings** | **Milestone III working on the following: Abstract, Introduction, Background. Literature Review, two case studies, problem statement, research questions, contributions made, investigative approach, implications for practice/research, challenges, case studies conclusions, working bibliography/works cited to include footnotes** | **4/6/2025** | **4/27/2025** | **Completed** |
| **No Team Meeting** | **Per instructor, focus on providing inputs for classmate’s capstone project** | **4/7/2025** | **4/7/2025** | **Completed** |
| **Sheryl Cummings** | **Milestone III assigned tasks to team members** | **4/7/2025** | **4/27/2025** | **Completed** |
| **Cummings/Thompson/Flood/Gilbert** | **Milestone III team meeting to discuss assigned tasks for completion** | **4/14/2025** | **4/14/2025** | **Completed** |
| **Cummings/Thompson/Flood** | **Milestone III team meeting to discuss tasks and clarification for deliverable(s)** | **4/21/2025** | **4/21/2025** | **Completed** |
| **Sheryl Cummings** | **Milestone III Inputted Start/Stop Completion dates for tasks assigned to each team member working on the project** | **4/21/2025** | **4/21/2025** | **Completed** |
| **Sheryl Cummings** | **Milestone III – Re-working Sections of Graduate Paper** | **4/23/2025** | **4/27/2025** | **Completed** |
| **Connor/Gilbert** | **Milestone III – Technical Documentation** | **4/8/2025** | **5/11/2025** | **Completed** |
| **Thompson** | **Milestone III – Update Project Goals** | **4/21/2025** | **5/11/2025** | **Completed** |
| **Thompson/Flood/Gilbert** | **Milestone III – Update Methodology** | **4/28/2025** | **5/11/2025** | **Completed** |
| **Flood/Gilbert** | **Milestone III – Test Development –**  **Update Results and Findings** | **4/28/2025** | **5/11/2025** | **Completed** |
| **Flood/Gilbert** | **Milestone III – Update Code Artifact UI’s and Control Modules** | **4/8/2025** | **5/11/2025** | **Completed** |
| **Flood/Gilbert** | **Milestone III – Final Prototype Deliverable Demonstration Submission** | **4/28/2025** | **5/12/2025** | **Completed** |
| **Thompson/Flood/Gilbert** | **Milestone III – Graduate Paper Methodology/Results** | **4/21/2025** | **5/11/2025** | **Completed** |
| **Cummings/Thompson/Flood/Gilbert** | **Milestone III – Graduate Conclusion** | **4/20/2025** | **5/11/2025** | **Completed** |
| **Cummings/Thompson/Flood/Gilbert** | **Milestone III – Final Presentation** | **4/21/2025** | **5/12/2025** | **Completed** |
| **Connor Flood** | **Milestone III- Food Production NetLogo Prototype** | **4/28/2025** | **5/12/2025** | **Completed** |
| **Connor Flood** | **Milestone III Food Production Model Data Process** | **4/21/2025** | **5/11/2025** | **Completed** |
| **Cummings/Thompson/Flood/Gilbert** | **Milestone III Status Update Meeting** | **4/28/2025** | **4/28/2025** | **Completed** |

**Milestone III Summary:**

**For Milestone III, our team focused on completing the necessary steps in the last phase of the project. These steps will include testing and validation, user instruction documentation and technical documentation.**

**During the last several weeks, our team encountered several issues and challenges in completing the final phase of the project. These issues and challenges include availability of personnel, inclement weather to include loss of power, learning curves related to the project and finalizing the research paper. The team was able to overcome these obstacles by conducting meetings to discuss ongoing issues and resolutions to assigned tasks for the milestone III deliverable.**