**Testing Strategy Worksheet**

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| **Project Name**  Delivery Route Functions | **Author**  Aung Moe Thwe |
| **Computing Environment**  Windows, MacOS, Visual Studio, C++ Compiler, GitHub, Jira | **Software Type**  C++ App project |
| **User Demographics**  EndUser | **Assumptions**  Environment has the software required to run. All team members have access to the tools and platforms. System is isolated and security is not taken into consideration. |
| **Purpose of Test**  Pathfinding performance. Map Initialization and Route Management. Handle edge cases and invalid inputs | **Phases of Testing**  Unit Testing, Integration Testing, System Testing, Performance Testng |
| **Scope of Testing**  What will and will not be tested:  Map Initialization, Route Management, Algorithms, Distance Calculations will be tested.  Outside Grid scenarios, Integration with other systems, User Interface will not be tested. | **Critical Success Factors**  Conditions which indicate success  Accurate Map Initialization, Effective Route Management  Efficient and Accurate algorithms and Resilience to edge cases and invalid inputs |
| **Testing Types**  Types of testing  **Blackbox, Whitebox, Exploratory Testing, Stress/Volume Testing, Documentation Testing, Acceptance Testing, System Testing** | **Tester Profiles**  Roles to conduct test  **Developers conduct unit and integration Tests. QA perform system and performance Tests. Leaders oversee processes and ensure everything is covered** |
| **Development/ Test Tools**  Tools and environment needed  **Visual Studio 2022 for development and testing. Microsoft C Unit Testing for automation**  **GitHub for Version Control. Jira and KanBoard to defect tracking and project management** | |
| **Business / Operational Concerns**  Ensure it is reliable and efficient  **Minimise operational disruptions by identifying and fixing issues early**  **Validate business rrequirements and user expectations** | |
| **Risks**  **Business**  Risks to business  **Delays in development affecting the overall timeline**  **Technical**  Technical risks to the project  **Potential integration issues with existing systems**  **Project**  Other Risks to the project  **Resource allocation and availability of team members** | |
| **Other**  Any other notes  **Regular Review and documentation of test-related activities**  **Continuous communication and feedback amongst members** | |