IOWRT-NIDS

Risk Assessment Document

11/15/2023

The risks have been sorted in descending order by exposure (probability X impact).

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| Risk type | Risk | Probability | Impact | Management Strategy | Exposure |
| Project risk | Users trust model too much | 53% | 3 | Inform the users on the confidence and pitfalls of using such a model. | 1.77777778 |
| Project risk | Other classwork prevents work on the project | 63% | 3 | Prioritize the project, and plan for other classwork when conflicts are unavoidable. | 1.68888889 |
| Technical risk | Model misclassifies data | 72% | 2 | Allow users to reclassify data for further retraining. | 1.67222222 |
| Technical risk | Program crashes | 47% | 3 | Lots of Unit Testing to find issues before they become problems. | 1.4 |
| Project risk | layout does not meet user needs | 42% | 3 | Assess and redesign interface according to requirements. | 1.38888889 |
| Project risk | Communication failure with client | 37% | 4 | Plan a meeting to discuss the issues with communication. | 1.36888889 |
| Business risk | Change to requirements | 43% | 3 | Clarify requirements early on, and utilize a modular design which enables requirement changes. | 1.15555556 |
| Technical risk | Improper IPC leading to bugs | 36% | 3 | Look for libraries that are easier to use. | 1.08 |
| Project risk | Missed Deadline | 27% | 4 | Plan ahead to identify possible harsh deadlines at least a week in advance. If the deadline cannot be moved, attempt to remove features from the deadline to make it manageable. | 0.97777778 |
| Technical risk | Too slow to respond to packet data | 33% | 3 | Display the packets before they receive analysis/a response. | 0.88888889 |
| Technical risk | Network packets in incompatible format | 33% | 3 | Use a different library that is sufficient for our purposes and has readable data. | 0.87111111 |
| Technical risk | interface is accessible by outside actors | 37% | 2 | Only allow known clients to connect to the server. | 0.85555556 |
| Technical risk | Too many packets for queue | 29% | 3 | Disregard the benevolent packets or packets of specific protocols and spin up new datacollectors to analyze the excluded packets. | 0.78222222 |
| Project risk | Someone on the team gets sick/ becomes unable to work | 23% | 3 | Maintain cohesion and communication so that work does not stall. | 0.77777778 |
| Technical risk | Doesn't collect/show all packets | 23% | 3 | Research and implement the database with a high-performance option that can handle the task. | 0.7 |
| Technical risk | The code does not work | 16% | 4 | Lots of Unit Testing to find issues before they become problems. | 0.65333333 |
| Project risk | insufficient meetings | 32% | 2 | Prepare materials and questions for meetings to get the most out of them. | 0.63333333 |
| Technical risk | Model fails to train | 17% | 3 | Try different activation functions, learning rates, and model structures. | 0.55555556 |
| Project risk | Viability failure | 18% | 3 | Discuss the possibility of useful functions for the final product with the stakeholders. | 0.55 |
| Project risk | Computer failure prevents work | 15% | 3 | Backup data on cloud. Can use school PCs | 0.51111111 |
| Project risk | Internet Failure preventing work | 17% | 3 | Coordinate tasks so that work can be done when communication is impossible. | 0.5 |
| Project risk | layout is confusing | 28% | 1 | Distribute user manuals and consider alternative interface designs. | 0.37777778 |
| Project risk | Code has an unresolvable version conflict | 9% | 4 | Identify equivalent libraries that can work together that can replace the confilicting libraries. | 0.31777778 |
| Project risk | User doesn’t understand interface | 23% | 1 | Distribute user manuals and consider alternative interface designs. | 0.31111111 |
| Technical risk | Final platform has unforeseen incompatibilities | 10% | 3 | Utilize reputably cross-platform libraries. | 0.31 |
| Project risk | Local/National emergency of some kind prevents work | 4% | 4 | In this case the project will be delayed until the end of the emergency. | 0.17477778 |
| Business risk | Client drops project | 4% | 5 | If occurs: Speak with professor to identify new stakeholder to manage the project. | 0.17111111 |
| Project risk | User confuses prod with testing | 7% | 2 | Clearly demarcate the currently-running version. | 0.11111111 |
| Business risk | Change in management | 4% | 2 | Plan many meetings with new stakeholders to identify changes in the plan and stratagies to deal with those changes. | 0.08666667 |
| Project risk | Computer stolen prevents work | 1% | 4 | Backup data on cloud. Can use school PCs | 0.05777778 |
| Project risk | Project work stolen | 2% | 2 | Keep work computers safe and use passwords. | 0.04666667 |