RISKS

| **Risk** | **Explanation** | **Contingency** | **How to prevent** | **Probability** |
| --- | --- | --- | --- | --- |
| Burnout | If I spend too much time on my project I may get burned out and stop wanting to work on it | Try to find motivation to finish the project | Do not overwork myself, work on the project to an acceptable degree | Significant (<20%) |
| I get extremely sick | If I am extremely sick I won’t be able to continue on my project | Take medications and try my best to continue working on the project, otherwise just wait to get better | Exercise, eat healthy & go outside | Extremely unlikely (<1%) |
| I get extremely hurt | If I am extremely hurt I would be unable to code my project | Try my best to continue working on the project, otherwise just wait to get better | Try not to get myself into dangerous situations, otherwise be careful | Extremely unlikely (<1%) |
| System failure | My computer fails and deletes all my code and everything I did on my project | Re-do the project from scratch | Have cloud backups for all my components so I can restore them at any time | Possible (<5%) |
| Developmental hell | I am never satisfied with my code and I keep wanting to improve things about it, not realising that the code is only ~25% of the marks for the project | Stop working on the code and start working on other parts of the program instead, make sure to spend equal amounts of time on all parts of the program | Make sure that I spend equal chunks of time on slowly improving the entire project over time, not over-focusing on just 1 aspect of it | Possible (<5%) |
| Pandemic | If there is another pandemic similar to COVID, and we all go into lockdown it would be harder for me to work on my project as I would receive less support from teachers while working from home | Do the project completely from home and without any support from school | Wear a face mask and keep 2m distance from other people, and do online shopping instead of physically going to the store. Try to limit time going outside to decrease the chance of catching the virus. | Unlikely (<2%) |
| I may lose all my motivation | If I lose my motivation or decide I don’t care, then I won’t be able to finish the project | Keep to a schedule , example: working 1 hour every day | Not go too hard on myself , otherwise I may start to hate doing the project. I should keep it to a normal level | Possible (<5%) |
| Internet blackout | If there is an internet blackout, it would make it impossible for me to work on my project in the meantime because everything I do requires internet connection. Or I would have to go to another place that has the internet, which would waste time as I’d have to travel there. | Wait until the blackout ends | Use less devices at home that connect to the internet | Possible (<5%) |
| Writing excessive documentation | Writing too much may be unnecessary and remove time from actually making the project | Go back and remove unnecessary documentation | Make sure I focus on all parts of the project equally | Possible (<5%) |

CONSTRAINTS

| **Constraint** | **Explanation** | **Contingency** | **Severity** |
| --- | --- | --- | --- |
| Not enough time | I don’t have enough time to do the project every day, sometimes even every week | Spend less time on things that aren’t the project. For example browsing the internet and watching youtube videos takes away from the time I could be working on the project | Moderate |
| Insufficient funds | Not enough money to buy myself a laptop so I can do the project from anywhere | My parents will help me get a laptop, or I could borrow one from the school and the teachers there would help me get one | Low |
| Tiredness | I get tired from doing this project every day which lowers my motivation to continue doing it | Make sure I don’t overwork myself and keep to a standard working schedule, e.g. no more than 2 hours every day | Moderate |
| Lack of python knowledge | If I don’t know how to do something in python, I would have to spend a lot of time learning it or never even learn it in the first place, which could waste a lot of time | Spend time on learning python and how to code certain things in python | High |
| Low-end computer | My computer at home isn’t the best, so the program may run slower at home which increases the time I spend on the project, basic things like running the program, opening chrome. | Use computers at school that are faster than my computer at home | Low |
| Not expert at python | Every new little thing I have to spend a lot of time to find out about and research, which takes away time from my project | Learn new python skills everyday and continue improving my skill in python and researching. | High |
| Distractions at home | My home environment is distractive, for example I have my family and I also want to spend time with them every day | Do my project at school after school, I can stay behind for an hour or two and do the project there. | Moderate |
| Hardware compatibility | My program and project can only be done on computer , which means I can’t do it on the phone for example when I am walking, which takes away from the time I could be working on the project | Install an emulator on the phone that would allow me to run a windows machine there and do the project that way. Alternatively, I can still edit documents on the phone, just not my code. So I could work on the documents while on my phone. | Moderate |
| Language barrier | A lot of code and documentation online is not written in English so it means I overall have access to less resources online than someone that knows a lot of languages | Use extensions that will automatically translate language for me on the internet, or parse it through a translator. | Low |