Risk Documentation - Devices

HomeDork - Interactive Smart House

Project Members

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Revision History

Date	Version	Description	Author
19/09/2021	1.0	Initial Risk Assessment	A, B, C,
29/09/2021	1.1	Fixed The Report Structure- used the format in the example document Added – Distance Group	A
03/10/2021	1.2	Added – Work, Code Complexity and Device Compatibility	A, B, C, D
14/11/2021	1.3	Updated – The priority	A, B, C, D
07/01/2022	1.4	Updated – The priority	A, B, C, D

Risk List

Risk Description	Priority
R1. Loss of a Group Member	Low
R2. Incapacitated Group Member	Low
R3. Distance Group Work	Low
R4. Defective Component	Low
R5. Code Complexity and Device Compatibility	Low

Risk Handling Plans

R1 Prevention and management of - Loss of a Group Member

Impacts

A loss of a group member by leaving for personal reasons is a high priority due the potential impact. The impact would cause a slowdown in the group placing more strain on the other group members and possibly effect our abilities to meet deadlines.

Indications

They become distant don’t do what they said they would, or they would tell us themselves.

Mitigation Strategy

We would handle this risk by evaluating the work needed to be completed calculating what it would take for the remaining members to do. If it would either over burden or run into deadline issues, we would request assistance from the other groups with more members and are ahead of their schedule. We would then supplement some of the load to meet the deadlines.

R2 Prevention and management of - Incapacitated Group Member

Impacts

A group member becomes incapacitated due to illness or injury. The probability is low, but the priority is medium because it may affect their work but, in most cases, it will probably not have a major impact on the project. The impact would just be having to work from distance or in some cases changing what the group member could do like a hand injury or something along those lines which could affect their speed or effectiveness.

Indications

A group member feels sick or notifies us of other sort of problem.

Mitigation Strategy

We would assess what work could be done by that group member and arrange for them to do what works best for them and transition the remaining members into different roles.

R3 Prevention and management of risk - Distance Group Work

Impacts

If everyone does not do what they are assigned or are not communicating it will increase the burden on the other group members since the they would have to help to finish the tasks assigned or chosen to undertake. This may could cause friction and fights among each other. We have an obligation to work together in periods during the project

Indications

A group member doesn’t communicate how far a long they are or the fail to show any progress in their coding.

Mitigation Strategy

As a group we must come to clear understanding of our assignments and good communication. Have group meetings where we present our work and explain, the changes or contributions they have made.

R4 Prevention and management of - Defective Component

Impacts

We receive a component from a supplier and the component is defective or during the project a component becomes defective. The probability is low, but the priority is high because of the impact and time it may take to get a new one. The impact may have serious consequences on the system depending on what it is that becomes defective if it is the Arduino the system will cease to function all together and may have a longer wait time based upon the supply as for something like a light it could have a very low impact and be easy to replace.

Indications

Doesn’t operate when we test the devices on the individual.

Mitigation Strategy

We know how to test if a component is working. The risk will be handled by testing all the components upon receipt and then if a faulty component comes up while the initial testing or after we will contact the supplier and order the part necessary immediately.

R5 Prevention and management of risk – Code Complexity and Device Compatibility

Impacts

We have limited knowledge in Arduino with a more complex and structured designed project with extra features. Based on searches of the documentation we will need to install numerous libraries, so compatibility of Arduino device becomes an issue, so the priority is high.

Indications

Only know if we look up library and see if we need a certain type of Arduino or some sort of other device to do it.

Mitigation Strategy

We will solve this risk by researching other ways by which we can implement the project to our vision whether we will be using a certain Arduino language and libraries for everything or another language like C++ which could give us access to those libraries. We will see what we need and start a list of special equipment necessary to implement these features. We will determine what we will be basing our code in and