



### Design Brief Template

School:parkrose

State:oregon

Division: Middle School

Team Members:bridger kevin brissa

**Problem Statement:** Briefly describe the people who will benefit from the project and the challenges they face. Include any inequity that the project hopes to address.

Our group name is Flex Tape. Our group team members are Kevin ,Bridger, and Brissa. Our client is Brissa's mom who works for the port of portland. The issue our client faces is at work with old equipment. Our client works in accounts payable and often uses the printer to print checks but when the printer breaks it is a long process to wait for it to be fixed. The benefits for our customer is a faster way to fix their printer. The challenge we faced was how we were going to fix the printer and find a faster solution to fix the jam. The printer was jamming not printing paper for our customer who works as an account payable and uses the printer to pay bills for the airport, which the printer not printing for a while is not good for this type of job.

**User Research:** Discuss key information about the users gathered through your research, interviews, and ongoing discussion with the users throughout the project.

The problem is that the printer gets jammed and then it takes time to get it fixed, the other problem is that it takes time to call someone to come get it fixed. The user wants to find a faster way to call the I.T. department to come and fix the printer.

**User Insight:** Discuss your team's understanding of the experiences, emotions, and motivations of the users.

We know that the person we interviewed has trouble with the printer and it took a long time to get it fixed and I think our group can understand this frustration when we have technical problems with our online classes it takes time to get it fixed and figured out.

**User Needs:** A specific list of user needs produced from the user Insight is provided.

- A faster way to call the I.T. department when the printer is jammed
- Something that is simple



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**Project Goals:** Goals selected are linked to and will adequately meet the users needs.

Our goal is to fix our client issue of alerting the I.T department in a way that did not take more time from our clients day and made it simple. The way we addressed the issue was to have a faster way to fix it. We coded the MicroBit to send a signal to a different micro bit located where the IT department is at. That way it would save time for our client who would need to find the phone number, call, and leave a voicemail.

**Key Features of Design:** The list of the key features illustrates that design will adequately meet project goals.

A key feature used in the design process was the use of the MicroBit buttons. When the printer gets jammed a person would press button 'B' sending a signal to the other micro bit that reads "Printer" using the LED's. This would signal that someone had indicated the printer was jammed. The second micro bit is located next to the person who will fix the printer. Instead of the user noticing the printer jam and needing to go to their desk to look for a phone number to call and ask for the printer to be fixed. Once the printer is fixed button 'A' can be pressed to reset the MicroBits.

**Status of Project:** Adequately examines the progress of the project and discusses potential next steps.

Currently the coding is complete and the next steps would be to create a case for the MicroBit to be attached to the printer. We would eventually like to add sound and vibrations in the future using a MicroBit 2. We also see the need to have a stronger transmitter so the signal can travel through walls and other barriers.

**Impact:** Discussion adequately describes how design may improve inequity for the user and/or remove barriers.

We could make our microbit more accessible for people who have a disability. For blind people we could put brails on it. Short people we could make it lower for it to be reachable. For color blind people we could make it a solid color.

**Reflection:** Demonstrates an increased understanding of Human Centered Design. Discusses personal growth and insights about designing for others and helping them overcome challenges.

We found out that what works for some people may not be compatible for others so we had to think of ways that it could work and we found out that we will run into problems in the future and we will have to improvise.



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**Prototype Graphic:** Graphic is easy to understand and adequately labels key features

