The goal for the Turn me into a Sprite project is to develop an application to create sprites for Scratch. The application would take a video input from the user, most likely through a webcam. Record a short clip. Then using computer vision technologies to detect the background and remove it from the frames. The user would then go through the video and select frames from it to make a .sprite3 file so that you can import it to Scratch to use for those projects.

**Functional Requirements**

**FR1 - User should be able to create a new sprite when loading into the project –** on launch the user should be able to start the process to create a new sprite.

**FR2 – When creating a new project an alert box should appear to ask the user for permission to user their camera –** The user should always be asked for permission to user their camera accessing it. When the user makes a new project, it should ask if the project can use their camera.

**FR3 – After creating a project. The user gets taken shown a screen with their camera displaying on it with the background getting removed in real time –** When getting ready to take a picture the user should be able to see themselves.

**FR4 – A Countdown should appear on the screen when the user presses the photo button -** When a user takes a photo, a should down appear on the screen till the photo is taken. This gives the user time to get the shot.

**FR5– All photos should be viewable and interactable -** After the user takes a photo, they should be viewable to see if the user likes it or not, if not they can delete it from the list. Users should also be able to rename these photos and generate with a unique name as well.

**FR6 – Preview Images –** Should be able to view all images taken so far.

**FR7 – Exporting Destination -** When exporting the project, the user should be able to decide where they want to export it to.

**FR8 – Exporting –** When the user is finished, they should be able to export the project in a. sprite3 format. So that the user should be able to use the sprite and their costumes in Scratch.

**Non-Functional Requirements**

**NFR1 – The UX should be very simple and intuitive to use** – As the target user are children, its important that the UI should guide the user intuitively so they know what they should do next.

**NFR2 – The system should not take longer than 3 seconds to complete any task.**