System Requirements:

1. <u>Computer with internet access</u> - Basic computer with decent internet access in order to maintain deep learning web application and provide necessary updates.

2. <u>EC2 Instance account through Amazon Web Service</u> - A web site to host our web application and make it easily accessible for RJI users to interact with.

3. <u>MySQL Database</u> - RDS Database is connected to the ec2 instance to handle large amounts of data. This data is stored and manipulated within RDS and can be accessed through the MySQL workbench.

4. <u>Python Web Classification Environment</u> - The image classification function is on the backend of the web site and this is where decisions are made on image quality.

Software Communication:

The ec2 instance is connected to an RDS database which has MySQL. This can save new users and access returning users for login.

After user logins into web application. RJI Users can use the upload feature to check image quality.

The Computer interacts with the ec2 instance by providing a UI for users to interact with web application.