

Risk Register

Revision History

Revision Level	Description of Revision	Person	Date
1.0	Initial release for S21-GENE403 final report	Waleed Ahmed	August 5, 2021
1.1	Highlighting risks #1 and #4 in red since they ended up being realized.	Waleed Ahmed	Dec 7, 2021
1.2	Highlighting risks that did not end up being realized in green.	Waleed Ahmed	April 8, 2022

No.	Risk	Type	Likelihood	Severity	Mitigation Plan / Comments
1	Bluetooth data rate is not sufficient for transferring an image in a reasonable amount of time	Technical	Medium	High	If this is true, it will require us to rethink our design and resort to using a network connection to send the image to a server to do OCR processing. This will mean the device will not longer be able to function offline.
2	OCR accuracy is not sufficient on machine text and text in the wild	Technical	Low	High	There has been some promising research into OCR algorithms using deep learning that we can leverage to mitigate this risk.
3	Network data rate is not sufficient for transferring an image in a reasonable amount of time	Technical	Low	High	Modern internet connections boast very fast speeds. It is unlikely this risk will be realized. The only way this could be an issue is due to hardware limitations from the raspberry pi.
4	Bluetooth communication between raspberry pi and iOS is not possible	Technical	Medium	High	Apple is very strict about usage between their devices and third-party accessories. It is possible that Bluetooth communication might not be feasible or practical.
5	Lack of product-market	Business	Medium	Low	We do not consider this a major

	fit				issue for our project as our goal with this project is not to make a fully-fledged product, but rather a working prototype paired with a roadmap to turn it into an actual product.
6	Inability to hit cost targets	Cost	Low	Low	Based on the hardware we have looked at. We think this is unlikely.
7	Lack of Communication	Communication	Low	Medium	We have been pretty consistent in terms of regular team meetings and internal communication to quickly resolve blockers, so this is unlikely to be a major problem.
8	Unrealistic Schedule	Schedule	Medium	Low	While we suspect this problem will likely arise due to us being naive about the difficulty of implementing certain features, it can be mitigated easily by readjusting the schedule.