

**CIS 3760 – Software Engineering**  
**Instructor: Prof. S. Scott**  
**Individual Accountability Report (IAR) Template**

Note. Refer to the Project Manual for detailed instructions for IAR submissions.

**Individual Accountability Report (IAR) Template**

The following questions **MUST** be included and answered completely for each submitted IAR.

**IAR must be submitted one of the following file formats: text or PDF.**

**Q1. Student Name:** Muhammad Danish Saeed

**Q2. Student ID:** 1077675

**Q3. Associated Team Deliverable:** Sprint 4

**Q4. Section#, Team #:** 02, 2

**Q5. What were the main technical or methodological concepts and/or skills that were required to complete this team deliverable? (bulleted list is preferred):**

- The technical or methodological concepts that were required to the complete this deliverable are the following:
  - Android Studio
  - Discord (Communication tool)
  - Google Docs (sharable content/documentation platform)
  - GitLab
  - Android phone (for testing)
  - Firebase (cloud storage)
  - Third-party QR encoding and decoding tools
  - SCRUM

**Q6. What was your existing level of experience with these topics/skills before your team began working on this deliverable? (1-2 sentences):**

- In the previous sprints, I learned many new things such as RecyclerViews(tables), custom dialogues, etc. Through the knowledge from previous sprints, I was able to smoothly complete my tasks for this sprint early and cleanly(clean code – split into functions for reusability)

**Q7. Comment on your individual academic, methodological, or technical learning during this deliverable, and what additional learning may be needed to understand or be more competent with these topics in the future?**

- Getting the user permissions (camera, external storage, etc.) is a little complicated in Android Studio. More research can be done with user permissions, mainly because the documentation on Android's official website is not up to date for the latest version.
- Automated Unit testing is something that is used in the real-world industries and additional learning is a "must" to be more competent in producing a quality and working feature/product. For Example, we could do automated testing for searching using filename, size, and other various filters and get a report at the end to see what went the way we expected and what went wrong

**Q8. What specific contributions did you make to this team deliverable? This should include technical or project management contributions.**

- In this deliverable, I implemented the QR Code generation. Which basically uses the cloud uploaded recording link and encodes it to QR Code that can be shared through external applications such as Messenger, WhatsApp, etc.
- I also implemented the QR code Scanning which scans a QR code through camera to decode the link that was originally encoded and download the corresponding recording that is stored in cloud.
- Of course, all these features require error handling which I also implemented for better user interaction

**Q9. With whom did you collaborate for any of the above contributions (be specific)?**

- I was supposed to do it with Arash but he got ill and was diagnosed with COVID which led me to do everything. But nevertheless, I was able to complete the tasks on time and early
- I implemented the cloud QR code generation which encodes cloud recording link to QR code and be able to share it with friends through external applications
- I implemented QR code Scanner. If a user shares a QR code, another user is able to scan it through the camera on his application and be able to download it on his phone

**Q10. Comment on how well you managed your time over the time period allocated in the Course timetable to this team deliverable (i.e. the time between the prior team deliverable to this team deliverable).**

- This sprint went surprisingly smooth because of the prior knowledge from the previous sprints. I completed all the tasks before the deadline because I managed my time well by listing what I had to do each day and work consistently throughout the week.