

Sprint 0 Reflection Report

The Face Recognition Attendance System with Canvas LMS Integration received successful initial preparation by our team in Sprint 0. Key accomplishments include:

1. Project Planning:
 - The team established project boundaries together with goals and achievement metrics through the creation of a Project Charter.
 - We developed a Work Breakdown Structure (WBS) which provided detailed information about project deliverables together with necessary tasks.
2. Requirement Gathering:
 - We established an extensive Software Requirements Specification (SRS) document by detailing both functional and non-functional requirements.
3. Tool Setup:
 - The development environment needs setup with GitHub for version control while Trello provides task management and Firebase enables database and authentication features.
4. Initial Design:
 - A set of draft wireframes presented the interface design which covered the dashboard area as well as the attendance tracking section and the administration functions.
5. Risk Assessment:
 - The project identified likely threats to face recognition accuracy and API downtime along with necessary countermeasures.

Lessons Learned

Our team maintained excellent alignment and trackability because we conducted frequent meetings and gave updates through Trello. Defining the project boundaries during the first phase prevented future extension of work and allowed for proper alignment with essential tasks. Early detection of risks enabled proactive strategy development for mitigation purposes.

Focus for Sprint 1

The main objective of Sprint 1 will concentrate on the following three points:

6. UI Development:

- The first step will be to complete wireframe development before starting frontend creation using React.

7. Backend Setup:

- The team should establish the Flask server and add OpenCV and Deep Face components for facial detection capabilities.

8. Canvas LMS Integration:

- The system commences its integration process with the Canvas LMS API to acquire student information while maintaining attendance records.

9. Testing Framework:

- The testing framework should be established to confirm both functional and accuracy aspects of facial recognition software.

Conclusion

Sprint 0 delivered effective groundwork to future project development. Development for Sprint 1 is now possible because we prepared through defining requirements and establishing tools and following the clear plan. The delivery team operates with the main goal to develop a working system that protects against security threats while fulfilling project objectives.