

## Swerve

# Quality Management Plan – Project: digitalCOI

# The Team

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# **Background Summary**

# **Problem & Opportunity**

70% of all commercial property tenants are not compliant with their insurance requirements. Commercial tenants must annually produce a certificate of insurance (COI) providing proof that their insurance policy meets the insurance conditions outlined in their lease agreement. Due to manual and inefficient COI tracking, landlords cannot enforce compliance. The case area is to create a compliance tracking system that takes an input of certificates of insurance and landlord lease agreements, and to create a brokerage system that enables more efficient insurance policy issuance and fulfillment. The goal is to automate compliance tracking, and portions of the follow up to increase compliance. The organization is a start-up, the product that that start-up will produce is called digitalCOI.

# **MOV Summary**

This project will be considered successful if the system can process a certificate of insurance and determine compliance in under 3 minutes in a live scenario.

This metric should be realized within the first 6 months of operations after initial deployment. This time is required to test and iterate with a partner client. The test's partner, Community Trust, will ensure that we have adequate feedback required to fulfil this timeframe.

# IT Quality Management Plan

# **Guiding Philosophy**

The guiding philosophy is to deliver an industry standard system with flawless documentation. This will be achieved by working seamlessly with the client and maintaining a constant communication channel to insure prevention of any quality defects

# **Quality Monitoring Processes**

#### **Process Metrics**

- 1. Time to Approve Phase The time it takes to approve a specific phase that has been accepted as done.
- 2. Variance of Time Projections for Deliverables The difference between the time estimated for deliverables to be completed verses the actual time to taken to complete them.

#### **Product Metrics**

- 1. False Compliance Positives The number of incorrect compliance confirmation instances that occur.
- 2. Crashes Per Working Day The total number of times the system crashes per working day.

#### **Project Metrics**

- 1. Milestones Met The number of milestones that have been met on time verses being late.
- 2. Overtime Count The total amount of overtime hours required by employees to complete the project.

#### Verification Activities

The following verification activities will focus on the process related activities and be performed throughout the duration of the project, before the final testing.

#### **Technical Reviews**

Each product deliverable must be subject to usability standards defined by the client. These standards ensure that the technology is usable with their existing systems with a low crash rate. These usability standards include GUI standards that follow material design.

## **Business Reviews**

Business Reviews occur after each project deliverable is said to be completed. These reviews are to ensure that the deliverable has met the quality standards of the client and the project team. The reviews will also ensure that the project is aligned with the business objectives and that the software development methodology has been followed.

# **Management Reviews**

The project manager and management team are subject to management reviews in order to compare the progress to the baseline project plan. This involves actively completing the MS Project document and updating it daily with the progress of each task and phase as it pertains to schedule budget, scope and quality objectives. Time to Approve Phase and Variance of Time Projections will be metrics used to evaluate the quality.

#### Validation Activities

The following validation activities will focus on the product-oriented deliverables to ensure they meet the customer's expectations and will mostly occur towards the conclusion of the project.

# **Unit Testing**

Unit testing will occur after object design, development and testing to ensure that each module, project or object is functioning properly. The testing will consist of Blackbox testing for functionality, Whitebox testing for logic and Greybox testing for the internal structure.

## **Integration Testing**

The integration testing will be to ensure that the logically related units work together properly after unit testing. Specifically, the connectivity between the artificial intelligence module, back end processing and front-end web portal will be tested.

# **Systems Testing**

The systems testing will be to ensure that the entire system works in an operating environment. The tests will include:

- Usability testing of the GUI and web portal,
- Performance testing related to time to check compliance and amount of errors per working day,
- Stress testing under the load of over 100 clients and 100,000 certificates of insurance,
- Compatibility testing between the system and the client's existing system and
- Documentation testing to ensure that the code is well documented and training modules are included.

#### **Acceptance Testing**

The acceptance testing of the entire system will be performed to ensure that the system is within the customer's scope and will occur after testing has been completed. The client will be responsible for ensuring that all the features and functionalities have been included and that the MOV will be achieved.