**Agile Structure for Stomble Project**

**Epics**

High-level goals representing broad project areas and objectives.

1. **Funding Strategy**: Covers all activities related to securing funding, from identifying potential investors to preparing and refining pitch materials.
2. **Product Development for Market Fit**: Focuses on adapting the product for customer acquisition and retention, involving iterations based on market feedback.
3. **GEN AI Integration**: Building and refining the Retrieval-Augmented Generation (RAG) LLM for enhanced product offerings.
4. **Front-end and Back-end Infrastructure**: Development of a robust front-end using Angular, a back-end with Java Micronaut, and integration of the IAM and SDK services.

**Features**

Key functionalities or major components within each Epic, providing specific value.

1. **Under Funding Strategy Epic**:
   * **Funding Pitch Deck Creation**: Tasks focused on creating a compelling, data-driven pitch deck for potential investors.
   * **Investor Outreach Program**: Activities related to building a network of investors and engaging with them.
2. **Under Product Development for Market Fit Epic**:
   * **Customer Feedback Mechanism**: Tools for gathering and analyzing customer feedback to guide product enhancements.
   * **User Journey Mapping**: Visual representation and analysis of customer journeys to optimize their experience.
3. **Under GEN AI Integration Epic**:
   * **LLM Model Training**: Training and refining the language model to enhance response quality.
   * **RAG Implementation**: Setting up the retrieval-augmented generation framework to support data-driven AI responses.
4. **Under Front-end and Back-end Infrastructure Epic**:
   * **Angular Front-end Development**: Building and refining the Angular-based interface, ensuring SDK integration.
   * **IAM & SDK Integration**: Developing identity management using Spring, and SDK integration with various frameworks.

**Stories**

User-centric, actionable items within each Feature.

1. **Within Funding Pitch Deck Creation Feature**:
   * **"As an investor, I want to understand the scalability and profitability of the product so I can make informed investment decisions."**
2. **Within Customer Feedback Mechanism Feature**:
   * **"As a user, I want to quickly provide feedback on the app's features so my opinion can influence future updates."**
3. **Within LLM Model Training Feature**:
   * **"As a product manager, I want the AI model to be able to answer common customer queries accurately, to enhance customer satisfaction."**
4. **Within Angular Front-end Development Feature**:
   * **"As a user, I want a smooth and responsive interface that makes it easy to navigate through features and access information quickly."**

**Tasks**

Detailed, specific steps needed to complete each Story.

1. **For the Funding Pitch Deck Story**:
   * **Define revenue model and assumptions.**
   * **Prepare and design financial forecasts and visuals.**
   * **Incorporate market analysis data and brand consistency.**
   * **Revise and finalize the pitch deck based on feedback from stakeholders.**
2. **For the Customer Feedback Mechanism Story**:
   * **Design and implement a user feedback form on the platform.**
   * **Enable data capture for feedback analytics.**
   * **Conduct user testing sessions to ensure form clarity and ease of use.**
3. **For the LLM Model Training Story**:
   * **Collect and preprocess training data for common customer inquiries.**
   * **Train model iteratively and refine based on evaluation metrics.**
   * **Deploy model on test servers for QA feedback.**
4. **For Angular Front-end Development Story**:
   * **Set up front-end components with Angular 14+.**
   * **Integrate SDKs for seamless API interaction.**
   * **Implement responsive design principles and conduct performance testing.**

**Acceptance Criteria and Definition of Done (DoD)**

**Acceptance Criteria**

Conditions required to mark each Story as complete, ensuring quality and consistency.

1. **For Investor Pitch Deck**:
   * **Pitch deck includes financial projections, a market overview, and a clear business model.**
   * **All visuals are branded, clear, and aligned with company standards.**
   * **Approved by both product and finance teams.**
2. **For Customer Feedback Form**:
   * **Feedback form is accessible and can be completed within 2 minutes.**
   * **Data storage for feedback is secure and easy to retrieve for analysis.**
   * **Form successfully tested with at least 10 target users.**

**Definition of Done (DoD)**

Checklist to ensure a task, story, or feature is fully complete and ready for release.

1. **Investor Pitch Deck**:
   * **Reviewed by at least two stakeholders.**
   * **Approved for distribution to potential investors.**
   * **Final deck uploaded to a secure storage platform.**
2. **Product Feature Iteration**:
   * **Feature tested and validated with user feedback.**
   * **Documentation updated to reflect new changes.**
   * **Deployed to production with no major issues.**

**DevOps and CI/CD Pipeline**

**DevOps Practices**

To support Agile development, DevOps integrates development and operations for reliable, consistent product delivery.

1. **Automated Testing**: Implement automated tests for unit, integration, and end-to-end testing for new features.
2. **Monitoring and Logging**: Use Prometheus and Grafana for monitoring; implement logging via ELK (Elasticsearch, Logstash, Kibana) stack.
3. **Continuous Feedback Loop**: Collect feedback from deployment and monitoring tools to continuously improve performance and stability.

**CI/CD Pipeline**

Automated processes for Continuous Integration and Continuous Deployment to streamline releases.

1. **Continuous Integration (CI)**:
   * **Codebase management**: Automatic code checks (linting, formatting) upon code commit.
   * **Automated Builds and Testing**: Automated builds and test execution triggered on each code push.
   * **Pipeline Tools**: Use Jenkins or GitHub Actions for CI automation.
2. **Continuous Deployment (CD)**:
   * **Automatic Deployment**: New features are automatically tested and deployed to staging or production environments.
   * **Rollback Mechanism**: Implement rollback capability for quick recovery if new updates introduce issues.
   * **Scheduled Releases**: Allow for safe deployment schedules, ensuring minimal disruption.
3. **Sample Pipeline Stages**:
   * **Code Commit** → **Automated Build** → **Automated Test** → **Deployment to Staging** → **Approval** → **Deployment to Production**
4. **Pipeline Benefits for GEN AI IAM/SDK Web Application**:
   * **Frequent, Reliable Updates**: CI/CD allows for frequent updates, ensuring continuous delivery of features and bug fixes.
   * **Automated Testing**: Quickly identifies issues, reducing manual testing effort.
   * **Efficient Development Cycle**: Faster iteration times lead to quicker feedback and improved productivity.