# Work Breakdown Structure (WBS) for Requirements Gathering Agent Project

**Introduction:** This Work Breakdown Structure (WBS) outlines the tasks required to complete the Requirements Gathering Agent project. It follows the 100% rule, ensuring all project work is included. The WBS is hierarchical, using a noun-based naming convention for work packages, and organized by project phases. This WBS will be used for planning, scheduling, budgeting, and monitoring project progress.

**1.0 Project Management**

* 1.1 Project Planning
  + 1.1.1 Scope Definition
  + 1.1.2 Schedule Development
  + 1.1.3 Resource Allocation
  + 1.1.4 Risk Assessment
  + 1.1.5 Communication Plan Development
  + 1.1.6 Quality Management Plan Development
* 1.2 Project Execution
  + 1.2.1 Task Management & Tracking
  + 1.2.2 Issue Resolution
  + 1.2.3 Change Management
* 1.3 Project Monitoring & Controlling
  + 1.3.1 Progress Reporting
  + 1.3.2 Performance Measurement
  + 1.3.3 Variance Analysis
  + 1.3.4 Corrective Actions
* 1.4 Project Closure
  + 1.4.1 Documentation Completion
  + 1.4.2 Final Report Generation
  + 1.4.3 Stakeholder Sign-off

**2.0 Software Development**

* 2.1 Context Management System Development
  + 2.1.1 Context Manager Design & Implementation
  + 2.1.2 Provider Abstraction Layer Development
  + 2.1.3 Context Injection Mechanism Implementation
  + 2.1.4 Testing and Validation
* 2.2 AI Provider Integration
  + 2.2.1 OpenAI API Integration
  + 2.2.2 Google AI Integration
  + 2.2.3 GitHub AI Integration
  + 2.2.4 Ollama Integration
  + 2.2.5 Fallback Mechanism Implementation
  + 2.2.6 Testing and Validation
* 2.3 Document Generation Engine Development
  + 2.3.1 Template Design & Creation
  + 2.3.2 PMBOK Compliance Implementation
  + 2.3.3 Automated Workflow Implementation
  + 2.3.4 Testing and Validation
* 2.4 CLI Interface Development
  + 2.4.1 CLI Design & Implementation
  + 2.4.2 Batch Processing Implementation
  + 2.4.3 Configuration Management Implementation
  + 2.4.4 Testing and Validation
* 2.5 Word (.docx) Export Functionality
  + 2.5.1 Library Integration
  + 2.5.2 Formatting & Styling
  + 2.5.3 Metadata Implementation
  + 2.5.4 Testing and Validation
* 2.6 PowerPoint (.pptx) Export Functionality (Future Phase)
  + 2.6.1 Library Integration
  + 2.6.2 Slide Design & Content
  + 2.6.3 Testing and Validation
* 2.7 Testing and Quality Assurance
  + 2.7.1 Unit Testing
  + 2.7.2 Integration Testing
  + 2.7.3 User Acceptance Testing (UAT)
  + 2.7.4 Bug Fixing

**3.0 Documentation**

* 3.1 User Documentation
  + 3.1.1 Installation Guide
  + 3.1.2 User Manual
  + 3.1.3 Tutorial Videos
* 3.2 Technical Documentation
  + 3.2.1 API Documentation
  + 3.2.2 Architecture Documentation
  + 3.2.3 Development Guide

**4.0 Deployment**

* 4.1 Deployment to npm
* 4.2 Release Notes Preparation

**5.0 Project Closeout**

* 5.1 Final Report
* 5.2 Lessons Learned Documentation

This WBS provides a comprehensive breakdown of the project. Specific tasks within each work package will be further defined during detailed planning. The level of detail can be adjusted based on project needs and complexity. This structure allows for effective tracking and management of the project throughout its lifecycle.