# Team Work Distribution Documentation

## Team Members

1. Alex
2. Athish
3. Aryan

## Overall Distribution Strategy

The work was distributed equally among team members, with each member taking primary responsibility for specific components while collaborating on shared tasks. Weekly meetings were held to sync progress and address challenges collectively.

## Individual Responsibilities

### Alex’s Responsibilities

#### Infrastructure Setup

* Setting up master node configuration
* Implementing private Docker registry
* Configuring network policies
* Managing SSL certificates for registry

#### Kubernetes Core Components

1. **Cluster Setup**
   * Master node initialization
   * Worker node joining scripts
   * Network plugin configuration
   * Testing cluster health
2. **Security Configuration**
   * Setting up RBAC policies
   * Configuring service accounts
   * Managing cluster roles
   * Implementing pod security policies

#### Athish’s Responsibilities

#### Application Components

* Developing ML inference service Kubernetes configurations
* Managing database deployments
* Implementing service discovery
* Configuring persistent storage

#### DevOps Pipeline

1. **CI/CD Setup**
   * Dockerizing applications
   * Creating build pipelines
   * Managing container tags
   * Implementing automated testing
2. **Monitoring Setup**
   * Setting up logging infrastructure
   * Implementing metrics collection
   * Creating monitoring dashboards
   * Configuring alerts

### Aryan’s Responsibilities

#### Producer-Consumer Implementation

* Implementing scalable producer jobs
* Managing consumer deployments
* Configuring Kafka in Kubernetes
* Performance testing and optimization

#### Scaling and Testing

1. **Scale Testing**
   * Implementing producer scaling
   * Testing multiple producer scenarios
   * Collecting performance metrics
   * Analyzing system behavior
2. **Integration Testing**
   * End-to-end testing
   * Load testing
   * Performance benchmarking
   * System validation

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#### Shared Responsibilities

### 1. Weekly Tasks

* Team meetings and progress updates
* Code reviews
* Issue resolution
* Knowledge sharing

### 2. Documentation

* Contributing to main documentation
* Reviewing each other’s documentation
* Maintaining knowledge base
* Creating presentation materials

### 3. Testing and Validation

* Cross-testing components
* Integration testing
* Performance validation
* Bug fixing