1. **Set up a New Spring Boot Application:**
   * Create a new Spring Boot project using Spring Initializr or your preferred method.
   * Implement the necessary backend functionality for BuzzLoop, including API endpoints, data models, and any other required components.
   * Test your Spring Boot application locally to ensure that it functions as expected.
2. **Manual Deployment to Docker Hub:**
   * Containerize your Spring Boot application by creating a Dockerfile.
   * Build the Docker image for your application.
   * Log in to Docker Hub and push the Docker image to your repository.
3. **GitHub Actions Deployment:**
   * Set up a GitHub Actions workflow to automate the Docker image build and push process on each push to the main branch.
4. **Manual Deployment to Kubernetes:**
   * Prepare Kubernetes manifests for deploying your Spring Boot application to a Kubernetes cluster.
   * Apply the Kubernetes manifests to your cluster manually.
5. **Automatic Deployment with GitHub Actions to Kubernetes:**
   * Extend your GitHub Actions workflow to include steps for deploying the Docker image to Kubernetes after it's pushed to Docker Hub.
6. **Testing**
   * Perform thorough testing of your Spring Boot application after each deployment to ensure functionality.