# **System Requirements Specification**

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For

# Insuranc e Managemen t Application

Version 1.0

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# INSURANCE POLICY MANAGEMENT System Requirements Specification SPRING BOOT RESTFUL APPLICATION

#### 1 Project Abstract

The **Insurance Policy Management** is an application with a backend implemented using Spring Boot with a MySQL database. The application aims to provide a comprehensive platform for managing and organizing all insurance policies for a company.

The **Insurance Policy Management** project presents developers with a vital task: to design and implement a comprehensive set of test cases using Junit&Mockito to validate the functionality of the application.

Your task is to develop a robust suite of test cases that thoroughly evaluate the insurance policy management activities under various scenarios, ensuring accurate results and error-free performance.

The test suite aims to ensure the accuracy and reliability of the system, providing confidence in its performance and enhancing customer satisfaction.

#### Following is the requirement specifications:

	Insurance Policy Management
24 1 1	
Modules	
1	Insurance Policy
Insurance Policy	
Module	
Functionalities	
1	Get all policies
2	Get policy details by id
3	Create a new policy
4	Update a policy by id
5	Delete a policy by id

#### 2 Rest endpoints

Rest End-points exposed in the controller along with method details for the same :

# 2.1 InsuranaceController

URL Exposed		Purpose
1. /api/policies		
Http Method	GET	Fetches all the policies
Parameter	-	·
Return	List <insurancepolicydt< td=""><td></td></insurancepolicydt<>	
	0>	
2. /api/policies/{id}	ا در ا	
Http Method Parameter 1	GET	Fetches a policy by id
	Long (id)	
Return	InsurancePolicyDTO	
3. /api/policies/	DOCT.	-
Http Method	POST	
	The policy data to be created should	
	be created should be received in	Creates a new policy
	@RequestBody	
Parameter	-	
Return	InsurancePolicyDTO	
4. /api/policies/{id}		
Http Method	PUT	
		Updates a policy by id
	The policy data to	
	be updated should	
	be received in	
	@RequestBody	
Parameter 1	Long (id)	
Return	InsurancePolicyDTO	
5. /api/policies/{id}	1	
Http Method	DELETE	
Parameter 1	Long (id)	Deletes a policy by id
Return	-	

#### 3 TEMPLATE CODE STRUCTURE

# 3.1 PACKAGE: com.insurancepolicy

#### Resources

insurancePolicyManage mentApplication	This is the Spring Boot starter of the application.	class	Already Implemented
(Class)			

# 3.2 PACKAGE: com.insurancepolicy.test

#### Resources

InsurancePolicyTests	☐This class needs to contains Junit &	Need to implement
	Mockito test cases to verify the correctness of the methods in the InsurancePolicyController and InsurancePolicyServiceImpl classes	
	☐Make sure the test cases you write achieves 100% code coverage.	

# 3.3 PACKAGE: com.insurancepolicy.repository

#### Resources

Description	Status
<ul> <li>Repository interface exposing</li> </ul>	Already Implemented
CRUD functionality for insurance	
policy Entity.	
	<ul> <li>Repository interface exposing</li> <li>CRUD functionality for insurance</li> </ul>

#### 3.4 PACKAGE: com.insurancepolicy.service

#### Resources

Class/Interface	Description	Status
InsurancePolicyService	• Interface to expose method	Already implemented.
(interface)	signatures for insurance policy related functionality.	
	<ul> <li>Do not modify, add or delete any method.</li> </ul>	

# 3.5 PACKAGE: com.insurancepolicy.service.impl

Class/Interface	Description	Status
InsurancePolicyServiceImp	<ul> <li>Implements</li> </ul>	Already Implemented.
I (class)	InsurancePolicyService	
	<ul> <li>Do not modify, add or delete</li> </ul>	
	any method signature	

# 3.6 PACKAGE: com.insurancepolicy.controller

#### Resources

Class/Interface	Description	Status
insurancePolicyController	• Controller class to expose all	Already Implemented
(Class)	rest-endpoints for insurance	
	policy related activities.	
	May also contain local exception	
	handler methods	

# 3.7 PACKAGE: com.insurancepolicy.dto

#### Resources

Class/Interface	Description	Status
InsurancePolicyDTO (Class)		Already Implemented

# 3.8 PACKAGE: com.insurancepolicy.entity

#### Resources

Class/Interface	Description	Status
InsurancePolicy (Class)		Already Implemented

# 3.9 PACKAGE: com.insurancepolicy.exception

#### Resources

Class/Interface	Description	Status
NotFoundException (Class)	• Custom Exception to be	Already implemented.
	thrown when trying to	
	fetch, update or delete the	
	insurance policy info which	
	does not exist.	

#### 4. EXECUTION STEPS TO FOLLOW FOR BACKEND

- 1. All actions like build, compile, running application, running test cases will be through Command Terminal.
- 2. To open the command terminal the test takers, need to go to Application menu (Three horizontal lines at left top) 

  | Terminal | New Terminal |
- 3. This editor Auto Saves the code.
- 4. These are time bound assessments the timer would stop if you logout and while logging in back using the same credentials the timer would resume from the same time it was stopped from the previous logout.
- 5. To execute and run test cases:

sudo JAVA\_HOME=\$JAVA\_HOME /usr/share/maven/bin/mvn clean install exec:java -Dexec.mainClass="com.insurancepolicy.InsurancePolicyManagementApplication" -DskipTests=true

\*If it asks for the password, provide password : pass@word1