Summary:

Following workflow represents the business process involved in underwriting workflow of a life insurance company.

1. When a new application is received, the case is first put in for scrutiny. There can be multiple users who can do the scrutiny. For each new task, a task has to be created and kept in the pool. One user must claim the task and then complete it.
   Capture the following data as representative data of an application form.
   a. Application No
   b. Name
   c. Product
   d. Premium Amount
   e. Sum Assured Amount

   The scrutinizer will check if the data is valid along with the attachments passed (not covered in this assignment). He should either provide his approval on validity of the application or keep it on hold for further information.

   If the case is approved, it should be moved to the next task

   If the case is kept on hold, the process instance should be in wait state but no task should be present, the case should be moved back to the scrutinizer's bucket once a signal is received. It can be kept back in common pool from where it has to be claimed again.

   You should use candidate groups for this requirement.

2. Next step is the underwriter, this also be a pool based assignment but there will be a concept of limits. Depending on the sum assured amount entered, the case should be visible to only a certain list of underwriters. For e.g., cases with SA more than 1 crore should be visible only to three out of 5 underwriters.

   Underwritiers can approve the case or reject it. Additionally, underwriters can also refer the case to few other users (Higher authority approval, Risk verification)

   When a case is referred for higher authority approval or risk verification, one corresponding task should be created. When the case is returned back to underwriter, it should be assigned back to the same underwriter who referred the task.
3. In case of high authority approval or risk verification, the users will either approve or reject the case. In both cases, the process should move back to underwriter with the provided comments. Underwriter will have final decision of approving or rejecting a case.

Notes:

1. You need to create a new spring boot project with activiti dependency to build this.
2. Need not build any user interfaces.

3. As there are no interfaces, you **must use Test Driven Development** to build and test these scenarios. Which is, first you need to write complete set of Junit test cases for complete functionality and then subsequently write logic to make sure all tests are passed.