

Programming Assignment



Rabobank

Engineer (C) for Tech4Dev

As a Developer within Aurum, you are responsible for delivering “Azure DevOps Management” functionalities using APIs and Pipelines. This programming assignment is about creating an Azure DevOps Pipeline [Template Task](#) that receives an azure DevOps repository (Id or complete name) as the input [parameter](#) and perform the following actions:

- Determine the default branch of the specified repository.
- Check if the following [permissions](#) are set on the default branch:
 - “Force Push” denied for everyone.
 - “Edit Policies” denied for everyone.
 - “Bypass policies when completing pull requests” denied for everyone.
 - “Bypass policies when pushing” denied for everyone.
- Check if the following [policy](#) is set on the default branch:
 - Minimum number of contributors set to 2.
 - Reset all approval votes (does not reset votes to reject or wait) when new changes are pushed.
- Set the permission and policy when each of the previous criteria has failed.

Mandatory delivery Items:

- Pipeline template code
- The candidate should be able to demo the task usage in the technical interview.

Optional delivery items:

- Create a pipeline that demonstrate the usage of the Template Task.
- Add a deployment stage/job/task to the pipeline with options for customizing the deployment strategies: the default option should be Canary deployment, but users should be able to also opt for Blue Green deployment.

Notes:

- The assignment is not trivial, and at least it should consider the following case: What to do when “Edit Policies” is denied for everyone but the required branch policy is not set.