**Q1 - SCENARIO**

A car rental company called FastCarz has a .net Web Application and Web API which are recently

Migrated from on premise system to Azure cloud using Azure Web App Service

And Web API Service.

The on-premises system had 3 environments Dev, QA and Prod.

The code repository was maintained in TFS and moved to Azure GIT now. The TFS has daily builds which

Triggers every night which build the solution and copy the build package to drop folder.

Deployments were done to the respective environment manually. The customer is planning to setup

Azure DevOps service for below requirements:

1. The build should trigger as soon as anyone in the dev team checks in code to master branch.

**Ans. While configuring the build pipeline or build definition, I’ll first select the SCM (Azure GIT) where my code reside. Then in trigger section I’ll enable the Continues Integration check box. ADO will ask me the branch Path and I’ll provide the path.**

**Upon configuring the above, whenever developer check in under repository ADO will trigger the build.**

2) There will be test projects which will create and maintained in the solution along the Web and API.

The Trigger should build all the 3 projects - Web, API and test.

**Ans. We can achieve the compilation of all above project by ADO provided task.**

The build should not be successful if any test fails.

**Ans. We have one check box under the task which is called continue on Failure, if it is unchecked build will get failed if test cases failed.**

3) The deployment of code and artifacts should be automated to Dev environment.

**Ans. After successful build pipeline and we have all the artifacts, we will integrate the Release pipeline which will deploy all the artifact on Dev Env.**

4) Upon successful deployment to the Dev environment, deployment should be easily promoted to QA

And Prod through automated process.

5) The deployments to QA and Prod should be enabled with Approvals from approvers only.

Explain how each of the above the requirements will be met using Azure DevOps configuration.

Explain the steps with configuration details.

**Ans. In release pipeline, ADO provide the functionality and using same we can achieve the above both task.**