



**Cloud Development, 2021 fall.  
Lab 6**

**Report**

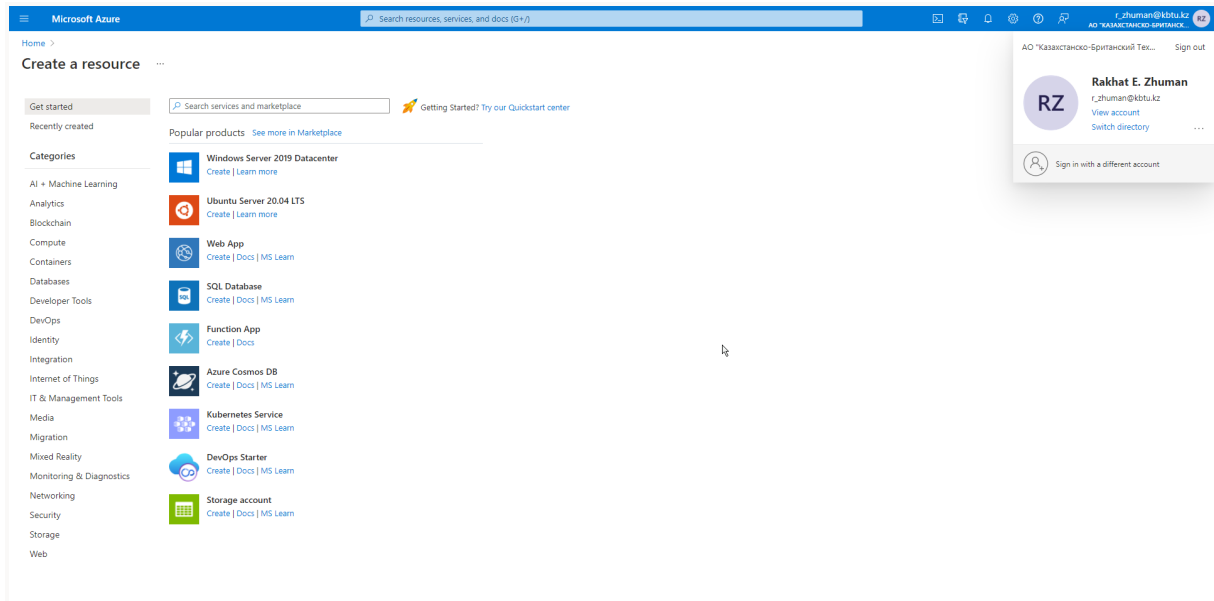
**Authenticating to and querying Microsoft Graph by using  
MSAL and .NET SDKs Student lab manual**

made by Zhuman Rakhat

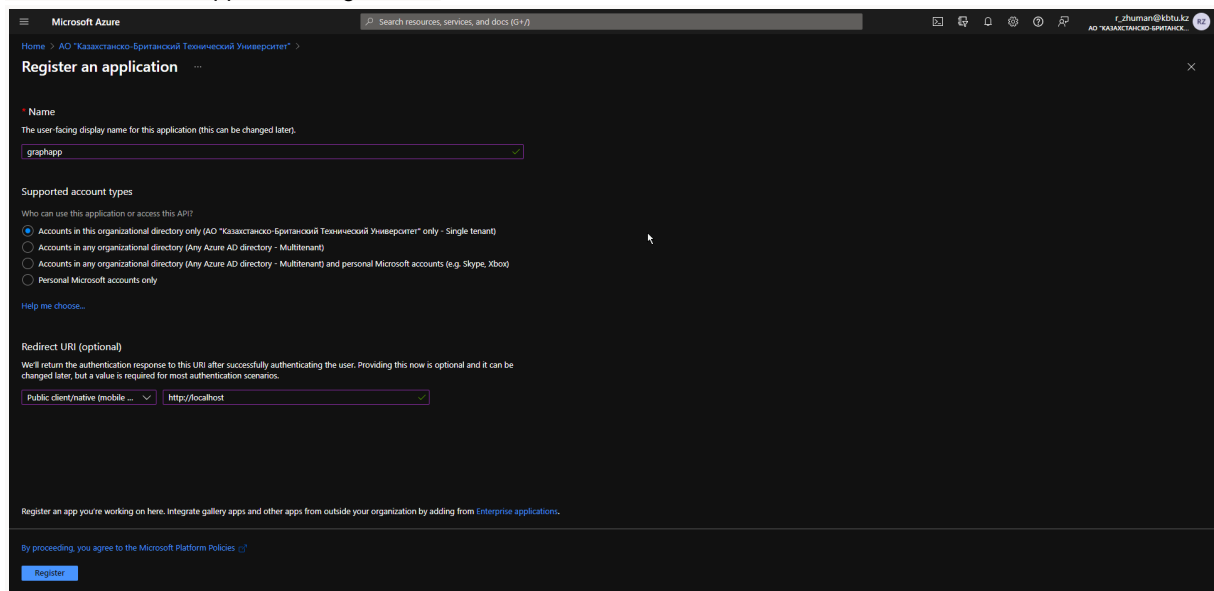
Almaty 2021

## Exercise 1: Create an Azure AD application registration

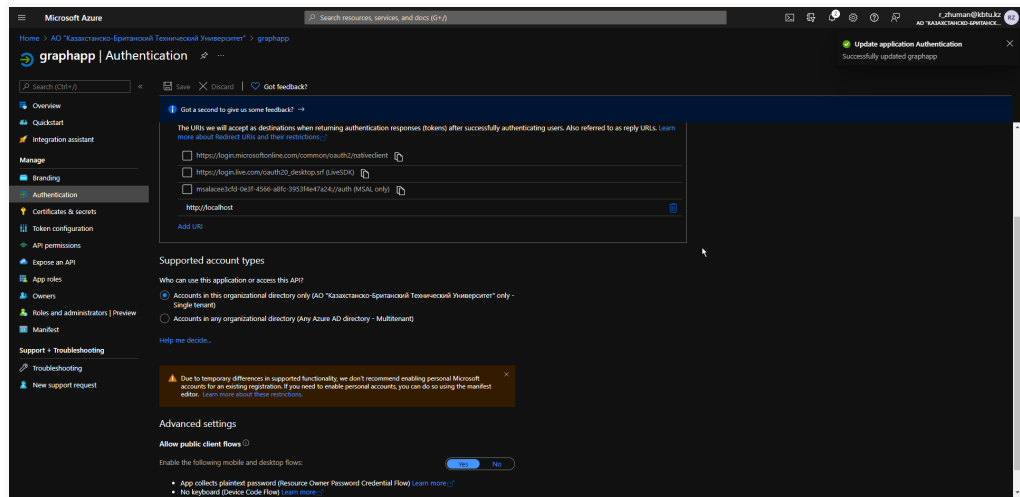
### Task 1: Open the Azure portal



### Task 2: Create an application registration



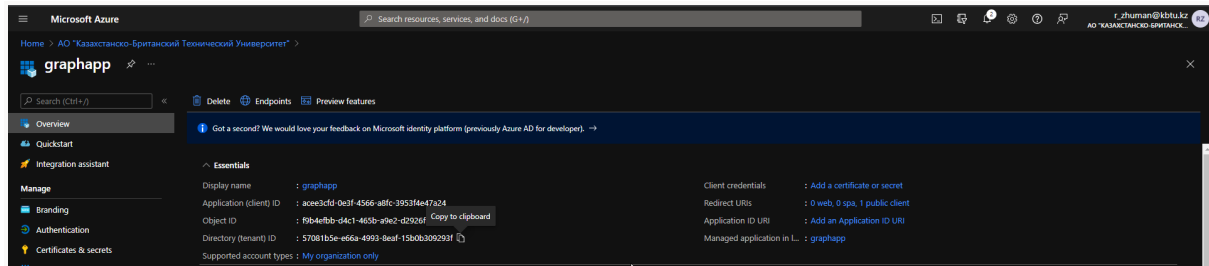
### Task 3: Enable the default client type



#### Task 4: Record unique identifiers

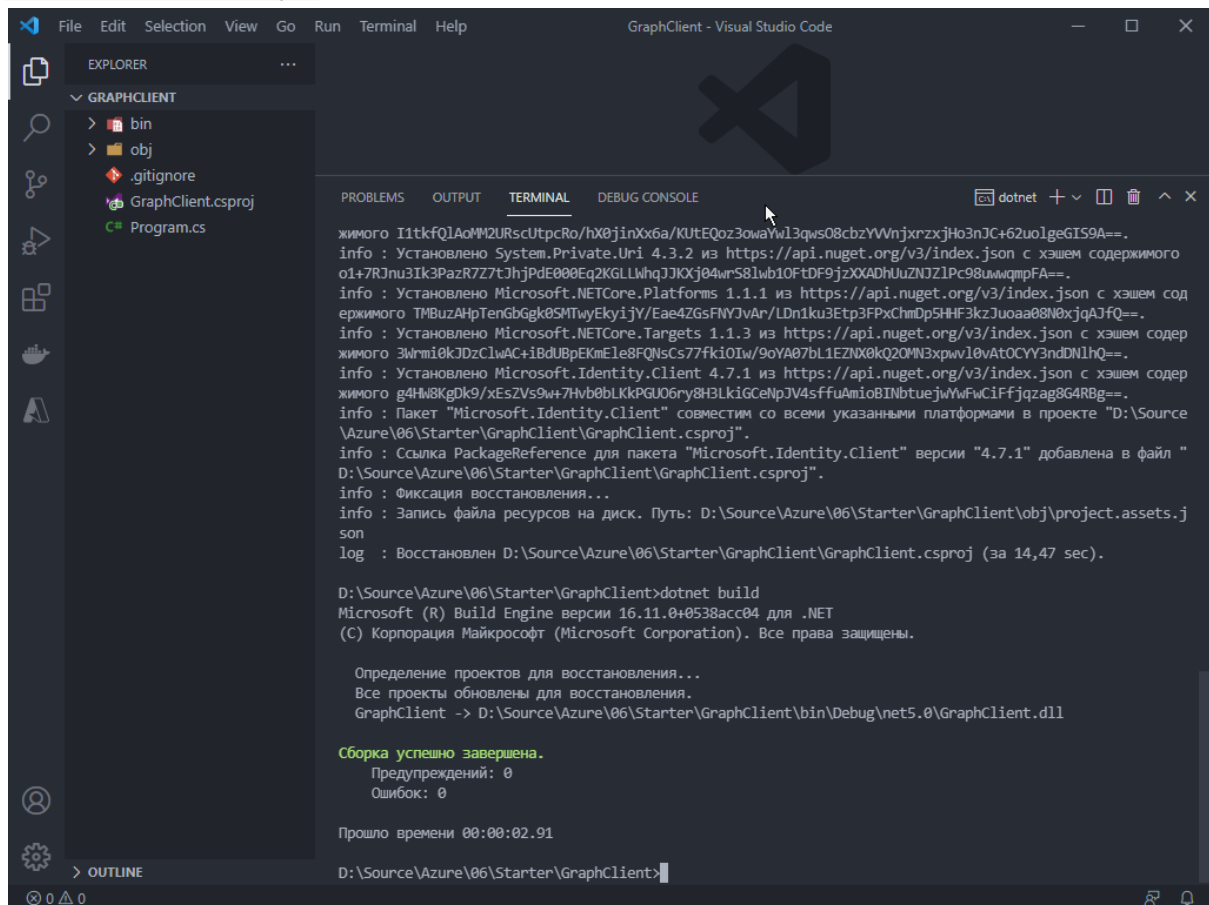
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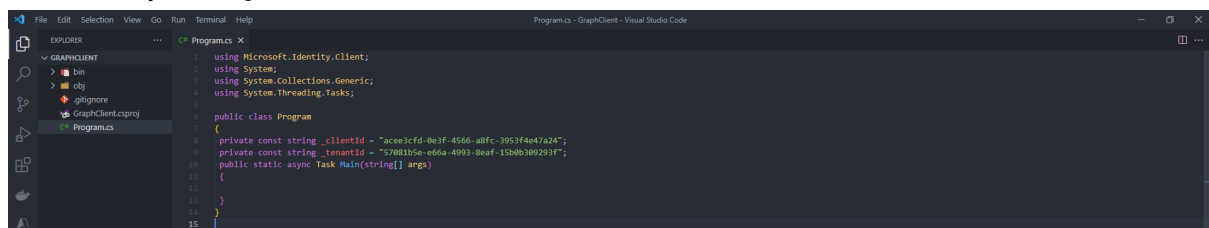


#### Exercise 2: Obtain a token by using the MSAL.NET library

##### Task 1: Create a .NET project

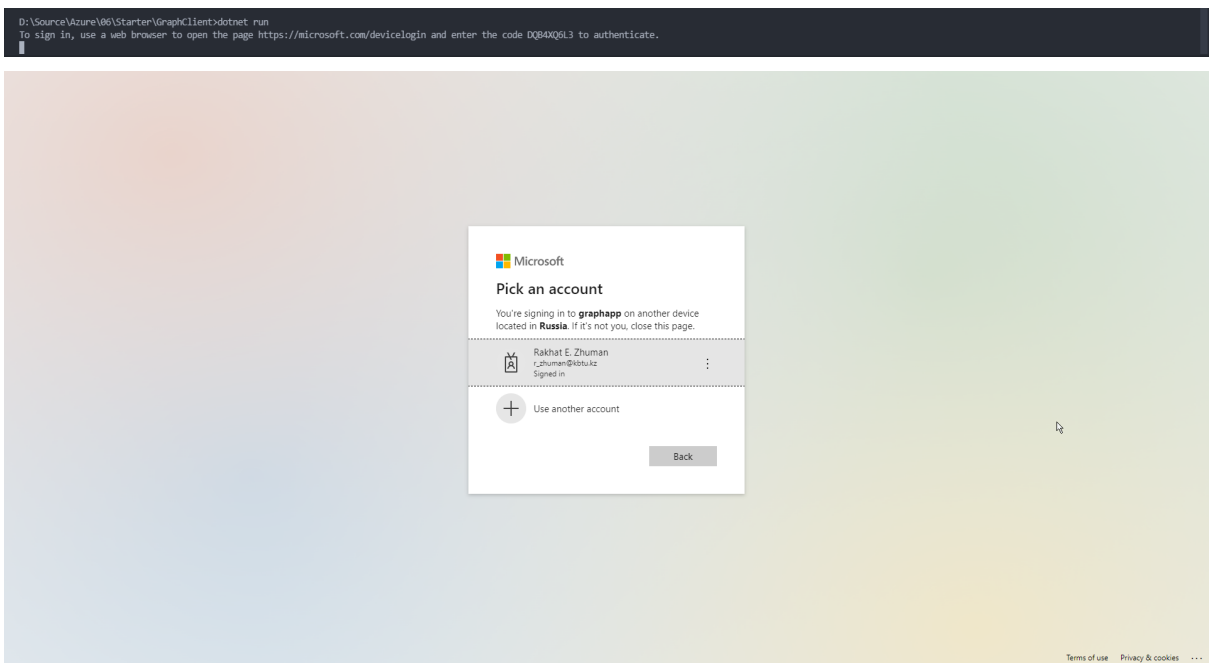


##### Task 2: Modify the Program class

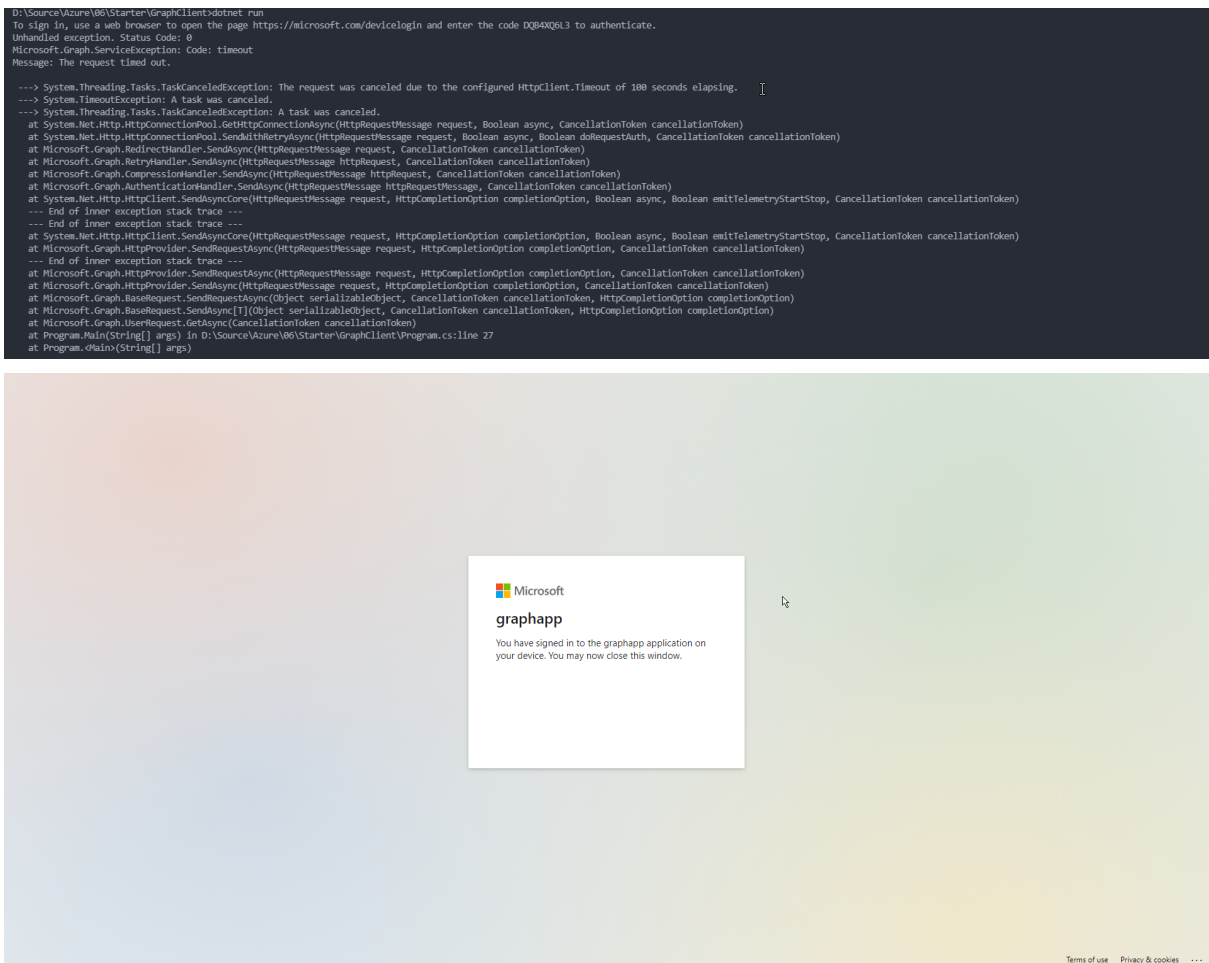


##### Task 3: Obtain an MSAL token

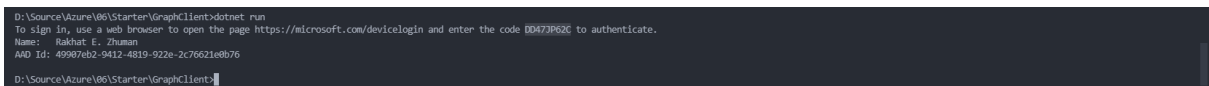
## Task 4: Test the updated application



## Handle timeout 100 second

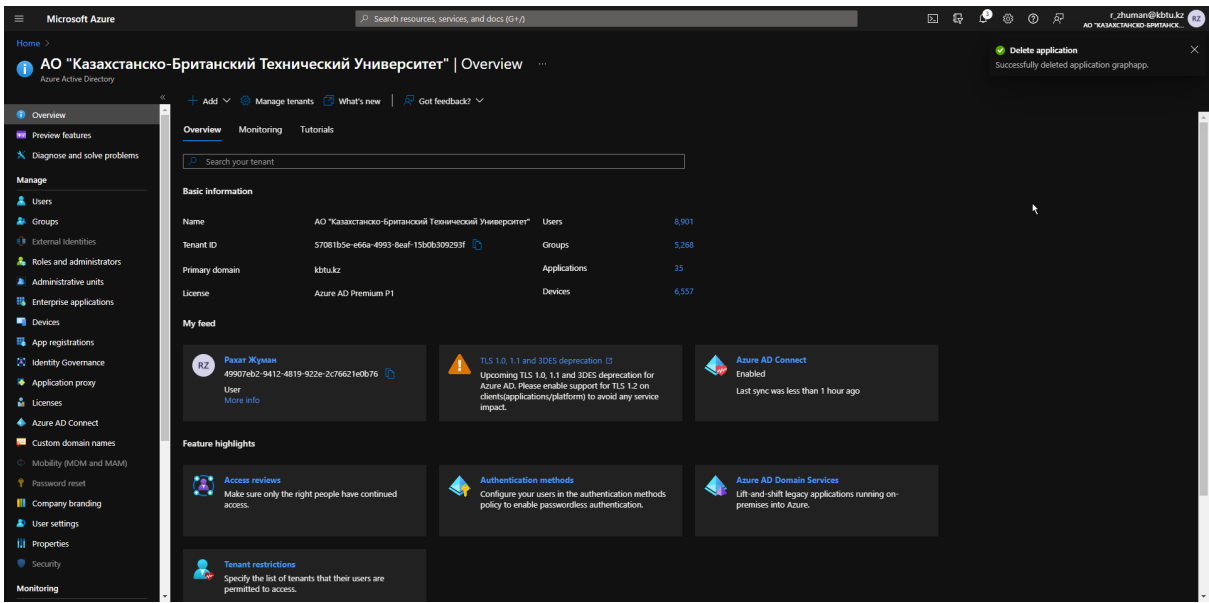


## Repeat and success



## Exercise 4: Clean up your subscription

Task 1: Delete the application registration in Azure AD



Task 2: Close the active applications  
Ok.