

MTS3072
Development of Mobile Application
SESSION 2022/2023

LAB TEST

Lab test instructions:

1. Please read the questions carefully.
2. Please ensure that you answer the questions in this file.
3. You are required to save as pdf and name the file with your matric number. Then submit your **LabTest file** via **MyGURU** e.g. **D20192029292.pdf**
4. Time allocated for the lab test is only 3 hours. The submission time will be monitored through timestamp submission in MyGURU.
5. This lab test questions is confidential. You are not allowed to share the question with anyone else.
6. This lab test question must be done individually. No discussion is allowed.

Your Name: Mohd Izzul Ikhwan Bin Mohd Yusof

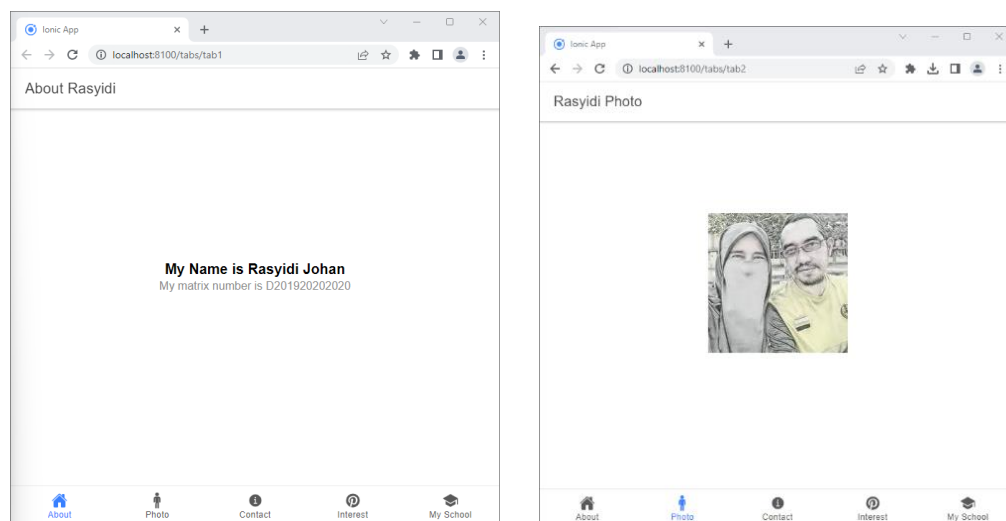
Your Matric Number : D20201095609

Group : MTS3072(B)

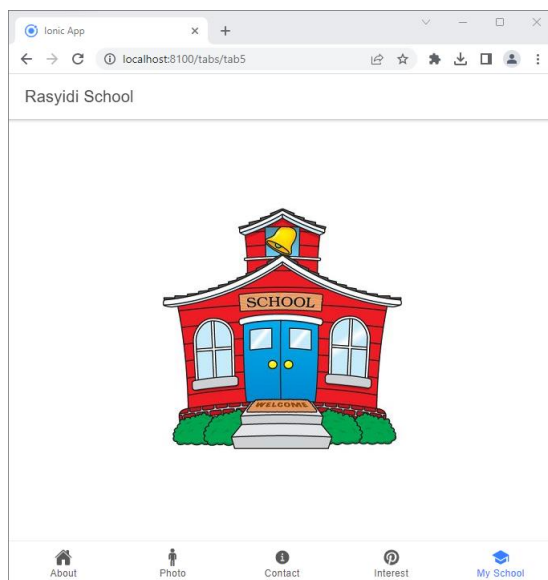
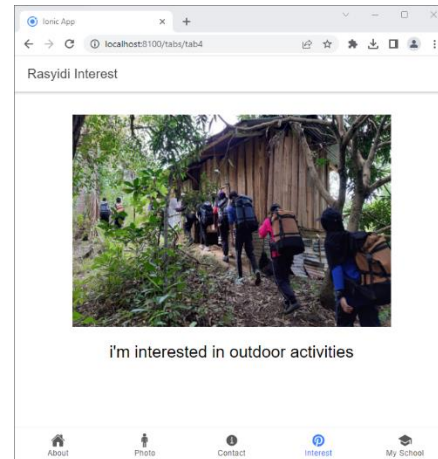
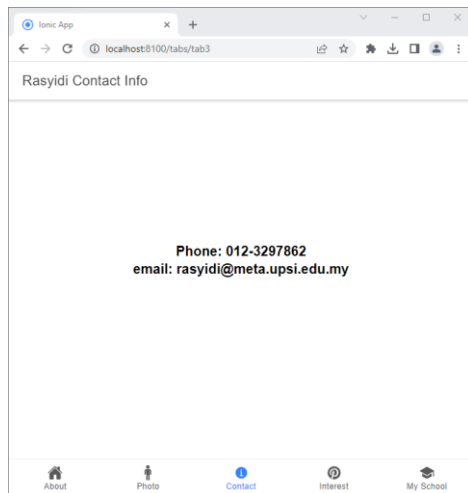
SCENARIO:

You are a final year UPSI student who will undergo Industrial Training in the coming semester. Therefore, you have been asked to prepare one of your portfolio apps that contains your personal information. The sample screens that need to be developed are displayed as in Figure below.

Anda merupakan pelajar tahun akhir di UPSI yang akan menjalani Latihan Industri pada semester akan datang. Oleh yang demikian, anda telah diminta untuk menyediakan satu apps portfolio anda yang mengandungi maklumat peribadi anda. Contoh skrin Output paparan yang diminta adalah seperti dalam Rajah dibawah:



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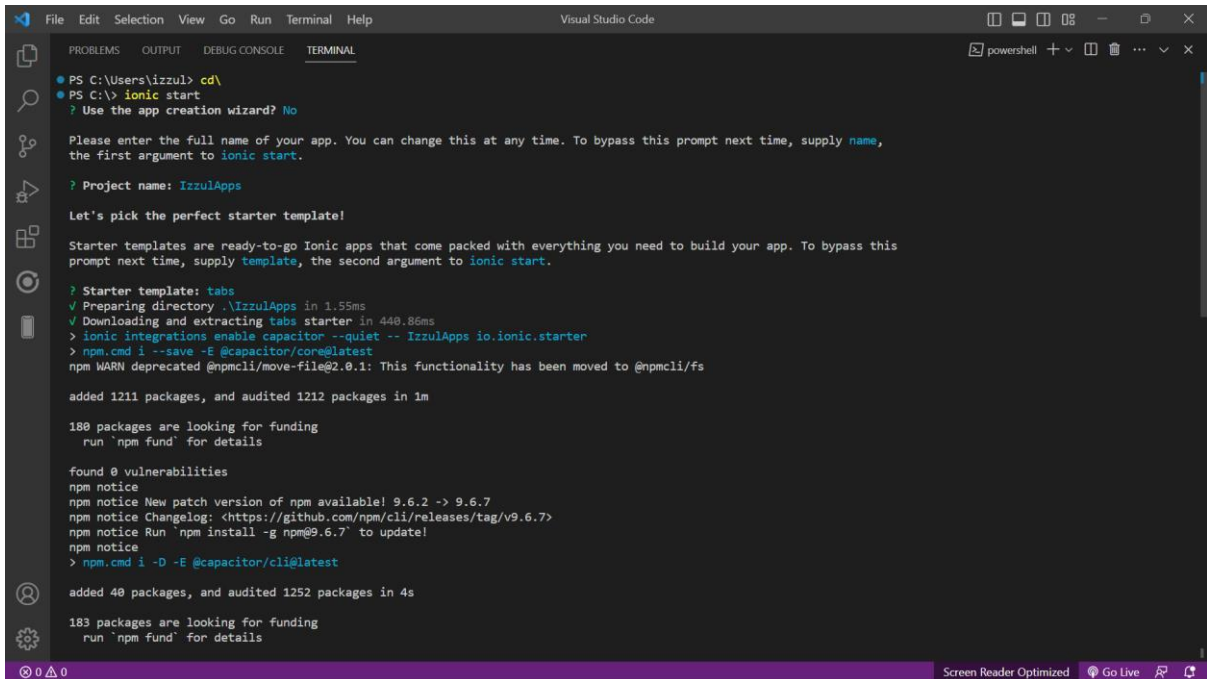
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Your tasks:

1. Create your apps using Angular framework with your name+Apps for example RasyidiApps. You need to choose a Tabs template.

Explain the ionic start command with an example of your screen capture. (3 marks)

Answer 1:



```
PS C:\Users\izzul> cd\
PS C:\> ionic start
? Use the app creation wizard? No

Please enter the full name of your app. You can change this at any time. To bypass this prompt next time, supply name,
the first argument to ionic start.

? Project name: IzzulApps

Let's pick the perfect starter template!

Starter templates are ready-to-go Ionic apps that come packed with everything you need to build your app. To bypass this
prompt next time, supply template, the second argument to ionic start.

? Starter template: tabs
✓ Preparing directory .\IzzulApps in 1.55ms
✓ Downloading and extracting tabs starter in 440.86ms
> ionic integrations enable capacitor --quiet -- IzzulApps io.ionic.starter
> npm.cmd i --save -E @capacitor/core@latest
npm WARN deprecated @npmcli/move-file@2.0.1: This functionality has been moved to @npmcli/fs
added 1211 packages, and audited 1212 packages in 1m

180 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
npm notice
npm notice New patch version of npm available! 9.6.2 -> 9.6.7
npm notice Changelog: <https://github.com/npm/cli/releases/tag/v9.6.7>
npm notice Run `npm install -g npm@9.6.7` to update!
npm notice
> npm.cmd i -D -E @capacitor/cli@latest
added 40 packages, and audited 1252 packages in 4s

183 packages are looking for funding
  run `npm fund` for details
```

1.0 Using the Visual Code Studio, before create the project file, we must enter the C:\ file first using `cd\` command.

1.1 After that, run the `ionic start` command to create a project file.

1.2 Name your project file name e.g. `IzzulApps`.

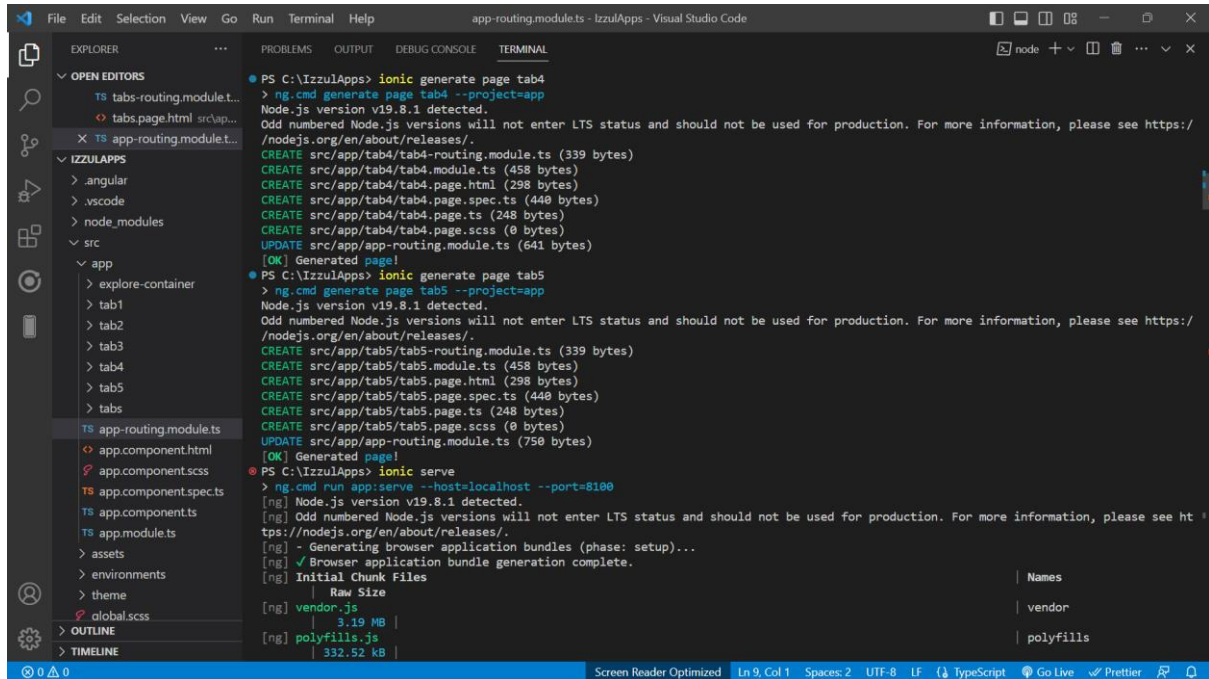
1.3 Choose the `Angular framework` using your keyboard arrow.

1.4 Choose the `Tabs` one using your keyboard arrow.

1.5 Finally, your project file was created in your C:\ file on your computer.

2. You need to create 2 tabs using the generate command. Explain the ionic generate command with an example of your screen capture. (3 marks)

Answer 2:



```
PS C:\IzzulApps> ionic generate page tab4
> ng.cmd generate page tab4 --project=app
Node.js version v19.8.1 detected.
Odd numbered Node.js versions will not enter LTS status and should not be used for production. For more information, please see https://nodejs.org/en/about/releases/.
CREATE src/app/tab4/tab4-routing.module.ts (339 bytes)
CREATE src/app/tab4/tab4.module.ts (458 bytes)
CREATE src/app/tab4/tab4.page.html (298 bytes)
CREATE src/app/tab4/tab4.page.spec.ts (440 bytes)
CREATE src/app/tab4/tab4.page.ts (248 bytes)
CREATE src/app/tab4/tab4.page.scss (0 bytes)
UPDATE src/app/app-routing.module.ts (641 bytes)
[OK] Generated page!

PS C:\IzzulApps> ionic generate page tab5
> ng.cmd generate page tab5 --project=app
Node.js version v19.8.1 detected.
Odd numbered Node.js versions will not enter LTS status and should not be used for production. For more information, please see https://nodejs.org/en/about/releases/.
CREATE src/app/tab5/tab5-routing.module.ts (339 bytes)
CREATE src/app/tab5/tab5.module.ts (458 bytes)
CREATE src/app/tab5/tab5.page.html (298 bytes)
CREATE src/app/tab5/tab5.page.spec.ts (440 bytes)
CREATE src/app/tab5/tab5.page.ts (248 bytes)
CREATE src/app/tab5/tab5.page.scss (0 bytes)
UPDATE src/app/app-routing.module.ts (750 bytes)
[OK] Generated page!

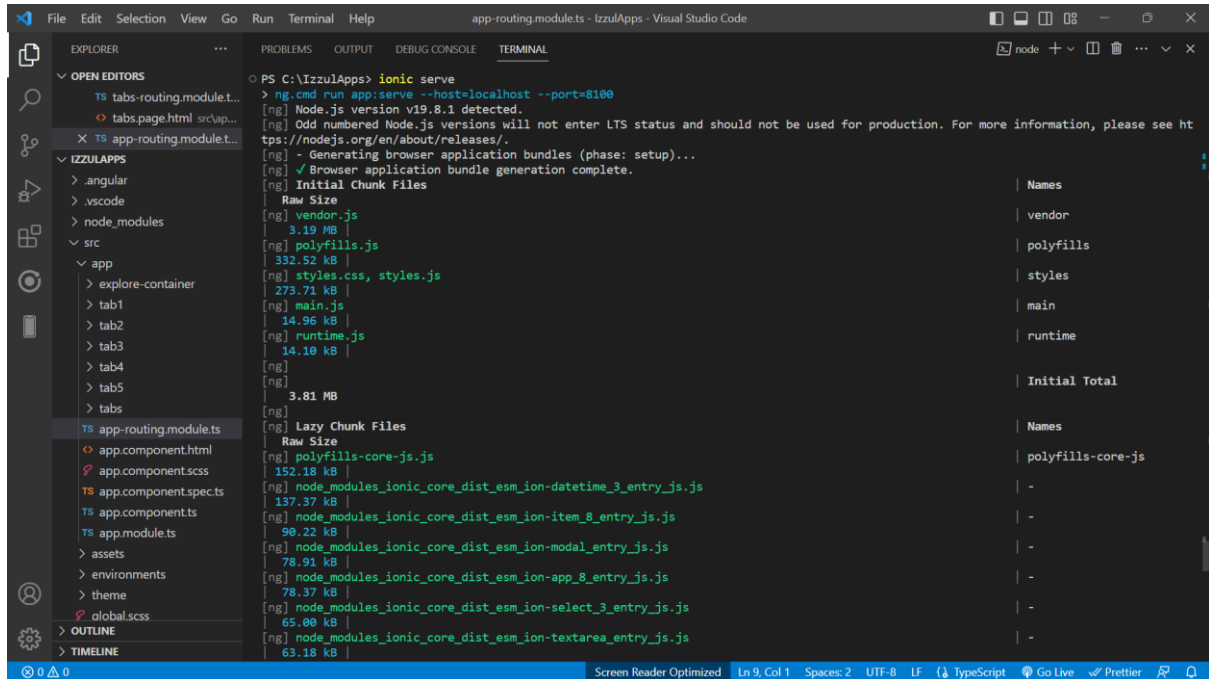
PS C:\IzzulApps> ionic serve
> ng.cmd run app:serve --host=localhost --port=8100
[ng] Node.js version v19.8.1 detected.
[ng] Odd numbered Node.js versions will not enter LTS status and should not be used for production. For more information, please see https://nodejs.org/en/about/releases/.
[ng] - Generating browser application bundles (phase: setup)...
[ng] ✓ Browser application bundle generation complete.
[ng] Initial Chunk Files
[ng]   Raw Size
[ng]   vendor.js | 3.19 MB | vendor
[ng]   polyfills.js | 332.52 kB | polyfills
```

2.0 To create a new tab in your apps, you must enter **ionic generate page tab4** in the VS Code Terminal.

2.1 Do the same thing to add one more tab in your apps, that is enter a command **ionic generate page tab5** in the VS Code Terminal.

3. You need to run your apps using the serve command. Explain the ionic serve command with an example of your screen capture. (3 marks)

Answer 3:



The screenshot shows the Visual Studio Code interface with the terminal open. The terminal displays the output of the command `ionic serve` run in a PowerShell prompt. The output indicates that Node.js version v19.8.1 was detected and that the browser application bundle generation is complete. It then lists the initial chunk files and their sizes.

```
PS C:\IzzulApps> ionic serve
> ng.cmd run app:serve --host=localhost --port=8100
[ng] Node.js version v19.8.1 detected.
[ng] Odd numbered Node.js versions will not enter LTS status and should not be used for production. For more information, please see https://nodejs.org/en/about/releases/.
[ng] - Generating browser application bundles (phase: setup)...
[ng] ✓ Browser application bundle generation complete.
[ng] Initial Chunk Files
| Raw Size | Names
| vendor.js | vendor
| polyfills.js | polyfills
| styles.css, styles.js | styles
| main.js | main
| runtime.js | runtime
| 3.81 MB | Initial Total
[ng] Lazy Chunk Files
| Raw Size | Names
| polyfills-core.js.js | polyfills-core-js
| node_modules_ionic_core_dist_esm_ion-datetime_3_entry_js.js | -
| node_modules_ionic_core_dist_esm_ion-item_8_entry_js.js | -
| node_modules_ionic_core_dist_esm_ion-modal_entry_js.js | -
| node_modules_ionic_core_dist_esm_ion-app_8_entry_js.js | -
| node_modules_ionic_core_dist_esm_ion-select_3_entry_js.js | -
| node_modules_ionic_core_dist_esm_ion-textarea_entry_js.js | -
```

3.0 To run our project file, you must enter a **ionic serve** command on VS Code Terminal.

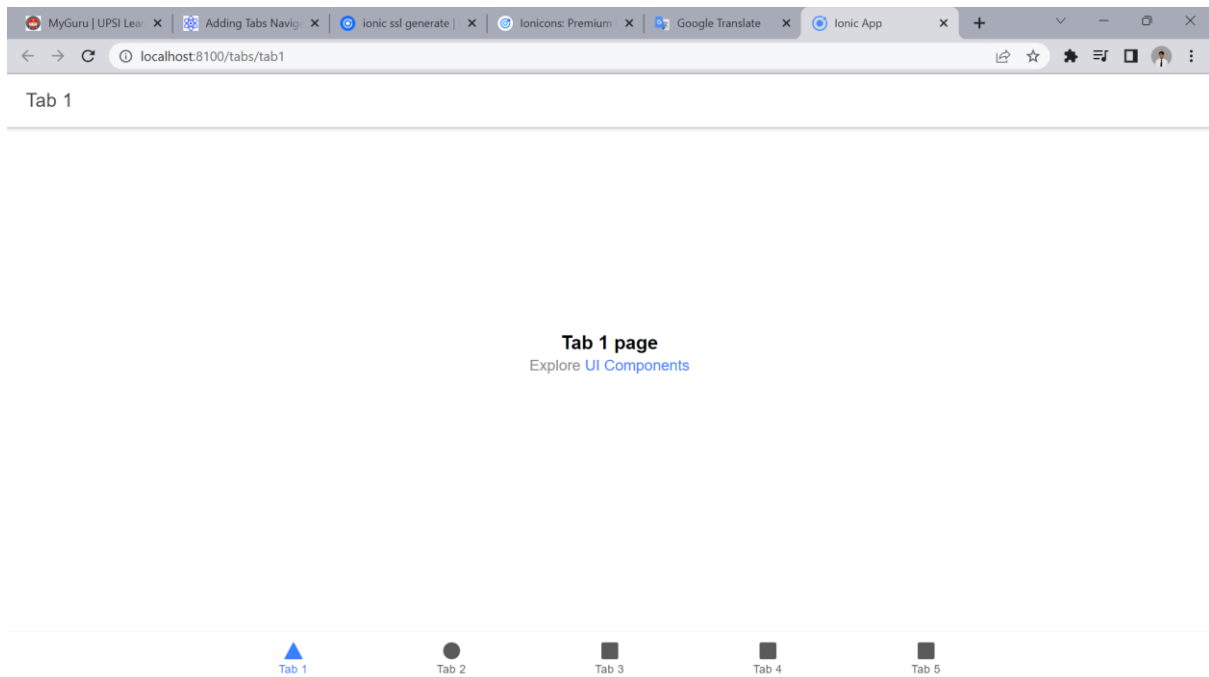
4. You need to link all the tabs pages in your apps. Copy and paste your code below and capture the your browser screen. **(3 marks)**

Answer 4:

```
{
  path: 'tab4',
  loadChildren: () => import('../tab4/tab4.module').then(m =>
m.Tab4PageModule)
},
{
  path: 'tab5',
  loadChildren: () => import('../tab5/tab5.module').then(m =>
m.Tab5PageModule)
},
}
```

```
<ion-tab-button tab="tab4">
  <ion-icon aria-hidden="true" name="square"></ion-icon>
  <ion-label>Tab 4</ion-label>
</ion-tab-button>

<ion-tab-button tab="tab5">
  <ion-icon aria-hidden="true" name="square"></ion-icon>
  <ion-label>Tab 5</ion-label>
</ion-tab-button>
```

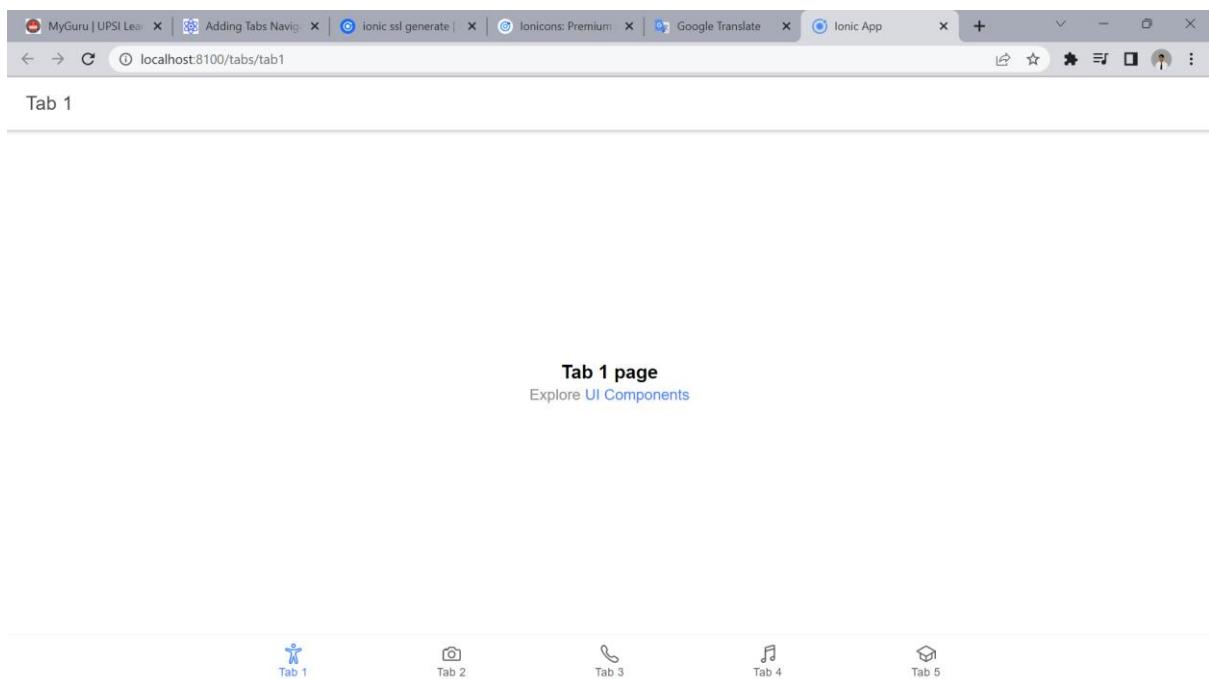


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5. You need to change the icon in tabs according to the ionic Open source icons library (<https://ionic.io/ionicons>). Copy and paste your code below and capture the your browser screen. (3 marks)

Answer 5:

```
<ion-icon name="accessibility-outline"></ion-icon>
<ion-icon name="camera-outline"></ion-icon>
<ion-icon name="call-outline"></ion-icon>
<ion-icon name="musical-notes-outline"></ion-icon>
<ion-icon name="school-outline"></ion-icon>
```

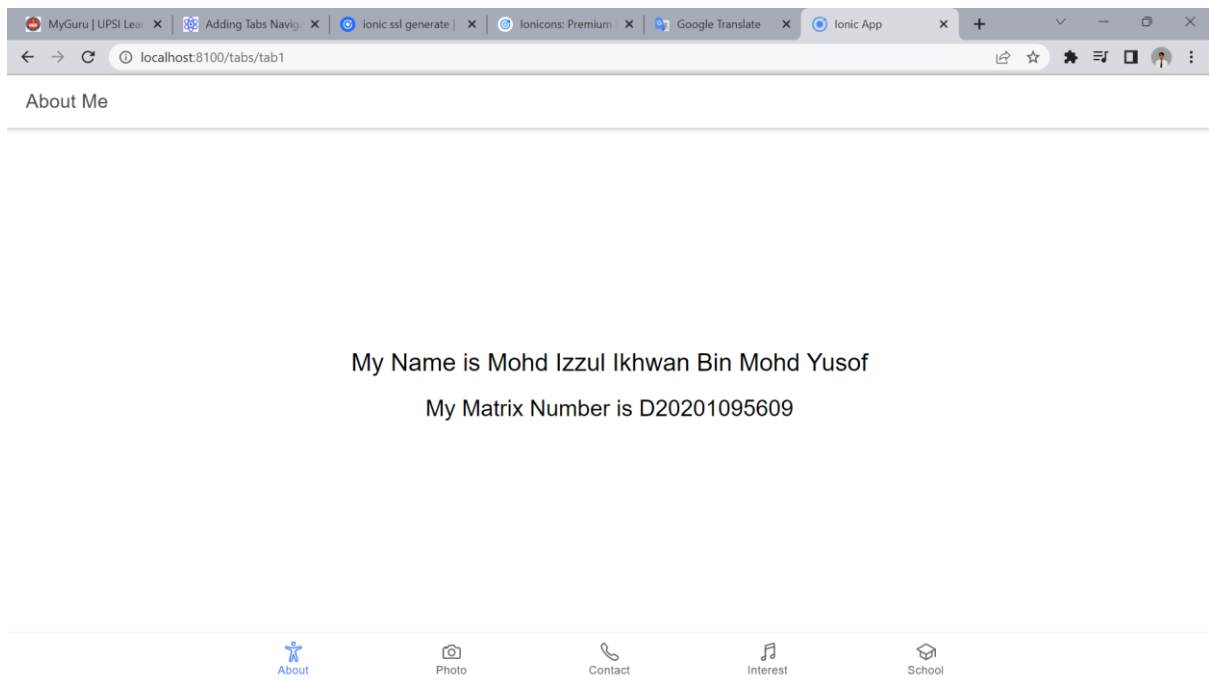


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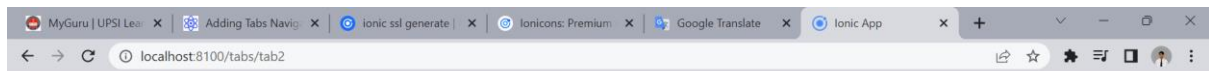
6. You need to add in the following information in your tabs accordingly: **(10 marks)**

1. About [Your Name] - Yourself (Nama, Matrix Number) e.g. About Rasyidi
2. Rasyidi Photo - Your latest photo (any photo)
3. Rasyidi Contact Info - Your Contact info (email, hp)
4. Rasyidi Interest (any of your interest)
5. Rasyidi School (any school images)

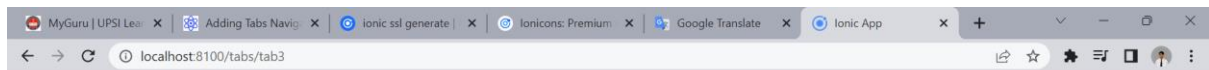
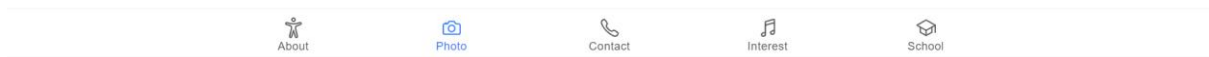
Answer 6:



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Photo

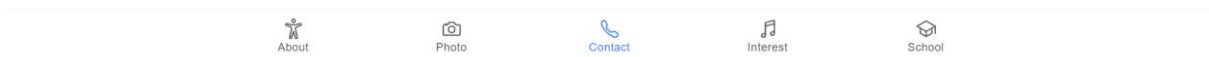


Contact

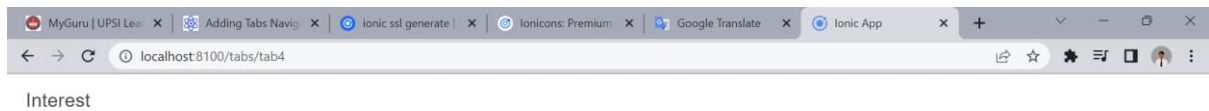
You can contact me at my phone number: 013-701 3122

or

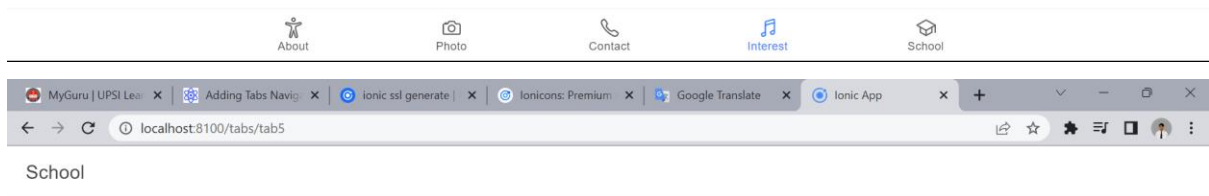
at my education email: d095609@upsi.siswa.edu.my / personal email: izzulikhwan111@gmail.com



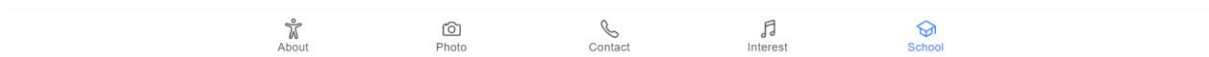
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I'm very interested and addicted with Music



Primary school at SK Balung Tawau, Secondary school at SMK Balung Tawau, Higher education at UPSI



-QUESTION END-