

MSA Assessment Introduction

This is a comprehensive assessment where you will be ranked against your peers. The MSA team has set a minimum standard that we require all students to pass but we will be expecting to see work well above and beyond the minimum specifications (as per industry standards).

Students will be placed in teams with similar assessment scores, and your placement preference is weighted against your group's overall assessment score, along with organisational preference and student preference.

Basic Requirements

- Create a new React + TypeScript web app
- Create an API to perform all CRUD operations (Create, Read, Update, Delete)
- Users should be able to enter in information appropriate to the REST API you have created, and your app should be able to display the returned results using that REST API.
- Host your web app and API's on Azure using Azure Dev-ops.
- Utilise source control via GitHub.

Advanced Requirements

We will fail students that do not tangibly attempt the following. Please complete as many as you can, feel free to work on your own advanced features. It will be at the discretion of your marker to determine if this feature meets the minimum requirement, you will also be expected to thoroughly explain your advanced feature during the interview.

Complete at least FIVE of:

- Unit testing implemented across all major code classes e.g. MS Test, Azure pipelines
- Consideration or features designed to assist with accessibility across site. E.g. Alternative text for images, Voice input, Supports translation of the web page.
- Creation and usage of custom branding that is integrated into end product. E.g. Custom Logo's and theming
- React native support
- Authentication (Camera integration, Social, Voice recognition)
- Social media Integration – Commenting, Liking, Sharing content
- Web Crawler

- Use Relational Databases
- Responsive UI (Web + Mobile)
- Signal R

Submission Format

You will be required to complete two specific submission tasks

- 1) Upload your source code to GitHub and submit using <http://aka.ms/msa2019p2> by 8am 17th August 2019. (40%)
- 2) Present to the MSA team in-person at the assessment centre
 - a. Presentations are 15-minute slots
 - b. 7 minutes of presentation. You should do a structured presentation using the given slide deck or design your own (20%)
 - c. 7 minutes of Q&A from MSA team, we will be assessing your technical ability in depth (40%)
 - d. Holistically, we will be assessing your intricate understanding of your solution, it's application in the real world and your presentation / soft skills.

Academic Integrity

The MSA Programme strictly enforces academic integrity and students that do not uphold academic integrity will not be allowed to proceed within the programme. Any work you submit should be your work and differentiated from others if you have collaborated or troubleshooted with other parties. This includes any sample solutions and tutorials we provide. Please clarify with us at nzmsa@microsoft.com if you have questions.

Deadline: 8am 17th August 2019

Book interview here: <http://aka.ms/msa2019p2submission>

Upload your code here: <http://aka.ms/msa2019p2>

Submit group preferences here:

<http://aka.ms/msa2019p2teams> (1 per group)

Have a question?

Email nzmsa@microsoft.com or ask on the [Facebook group](#)