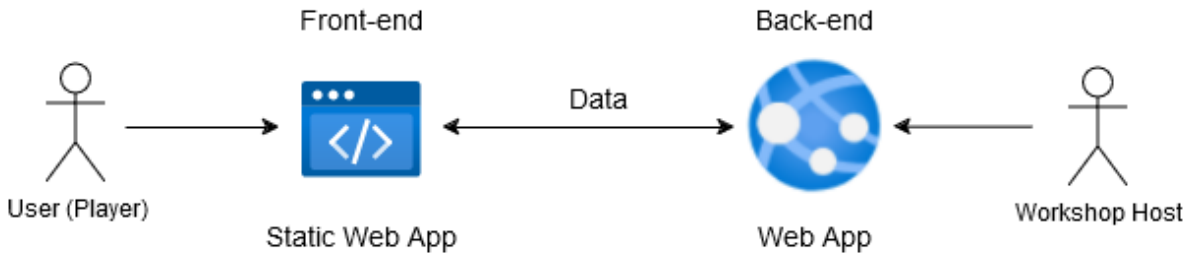
Card Sorting Game

Architecture overview



Front-end

- Originally an app for mobile devices, not for browser usage
- Built using Ionic + Angular
  - HTML, TypeScript, CSS
- Allows users to sort cards according to different sorting algorithms
  - Users must follow the steps exactly as the computer would do it
- Free Play mode to sort cards in any way

Back-end

- Built using Express JS
  - JavaScript
- During workshops, users can send their statistics (number of comparisons, swaps, mistakes, time, etc.) to the back-end
- Workshop manager can look at those statistics and compare student performance

Steps to host on Azure

Front-end

To host the front-end, I followed these steps:

1. Login to Azure
2. Go to Azure App Services
3. Create new Static Web App
4. Select Azure Subscription
5. Create new resource group for this project
6. Give the App a name
7. Select GitHub repository as source for this static web app
8. Select Angular as the Framework
9. Select 'West Europe' as staging region
10. Once the app is created, create a new route from '/' to '/home'

Back-end

For the back-end I went for a different approach and tried deploying to Azure directly via VS Code:

1. Install the 'Azure Tools' extensions package in VS Code
2. Connect VS Code to my Azure account
3. Create a new Web App via VS Code
4. Give the App a name
5. Use the resource group created earlier for the front-end
6. Select newest Node version as runtime stack
7. Select Linux as OS
8. Create new service plan with basic tariff
9. Deploy

In theory these steps should work, but I ran into some issues after hitting deploy.

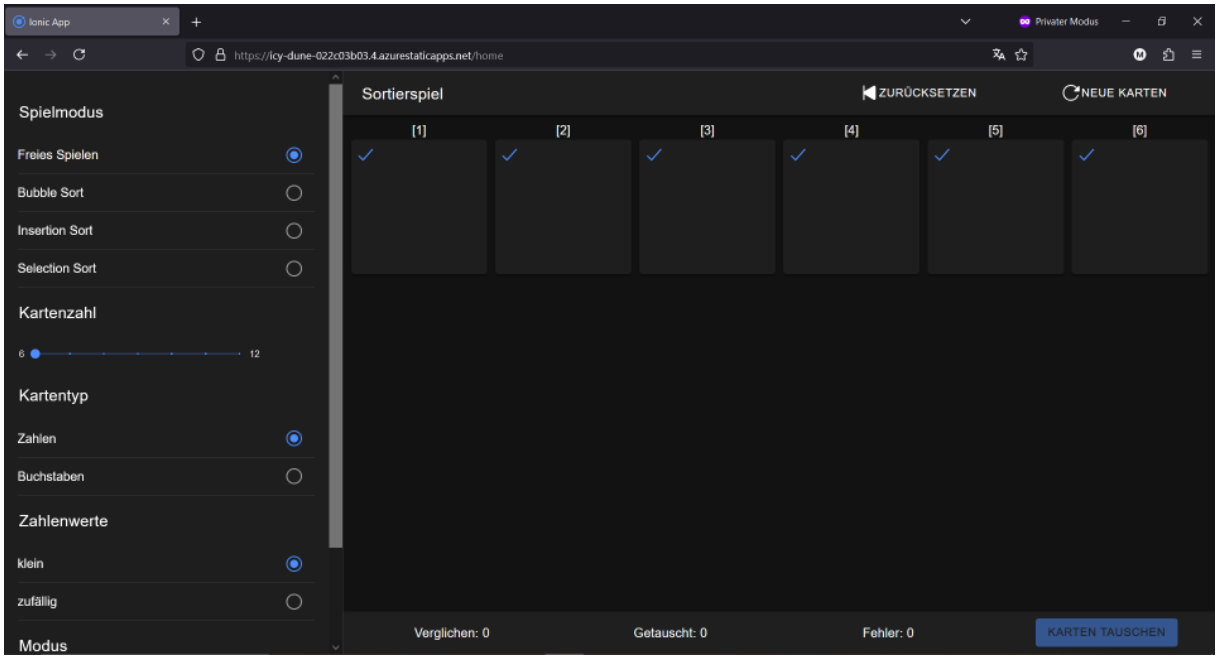
I got several errors of this kind:
The subscription is not registered to use namespace Microsoft.Storage

https://learn.microsoft.com/en-us/answers/questions/1239876/the-subscription-is-not-registered-to-use-namespac

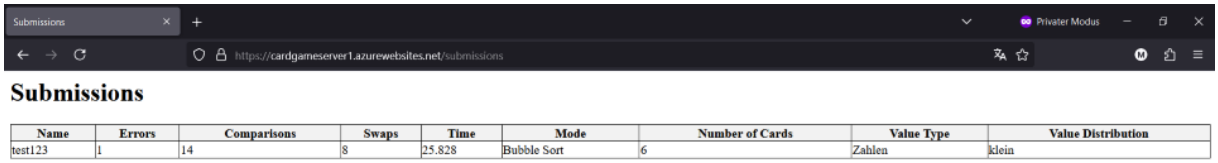
Using this forum post I managed to fix the issues by activating several namespaces under subscription → resource providers.

Example pictures

Front-end



Back-end



Links

https://github.com/michael9186/sortingGameWeb

https://icy-dune-022c03b03.4.azurestaticapps.net/home

https://github.com/michael9186/sortingGameServer

https://cardgameserver1.azurewebsites.net/