Challenge D
(Energy Consumption Profiling Application)

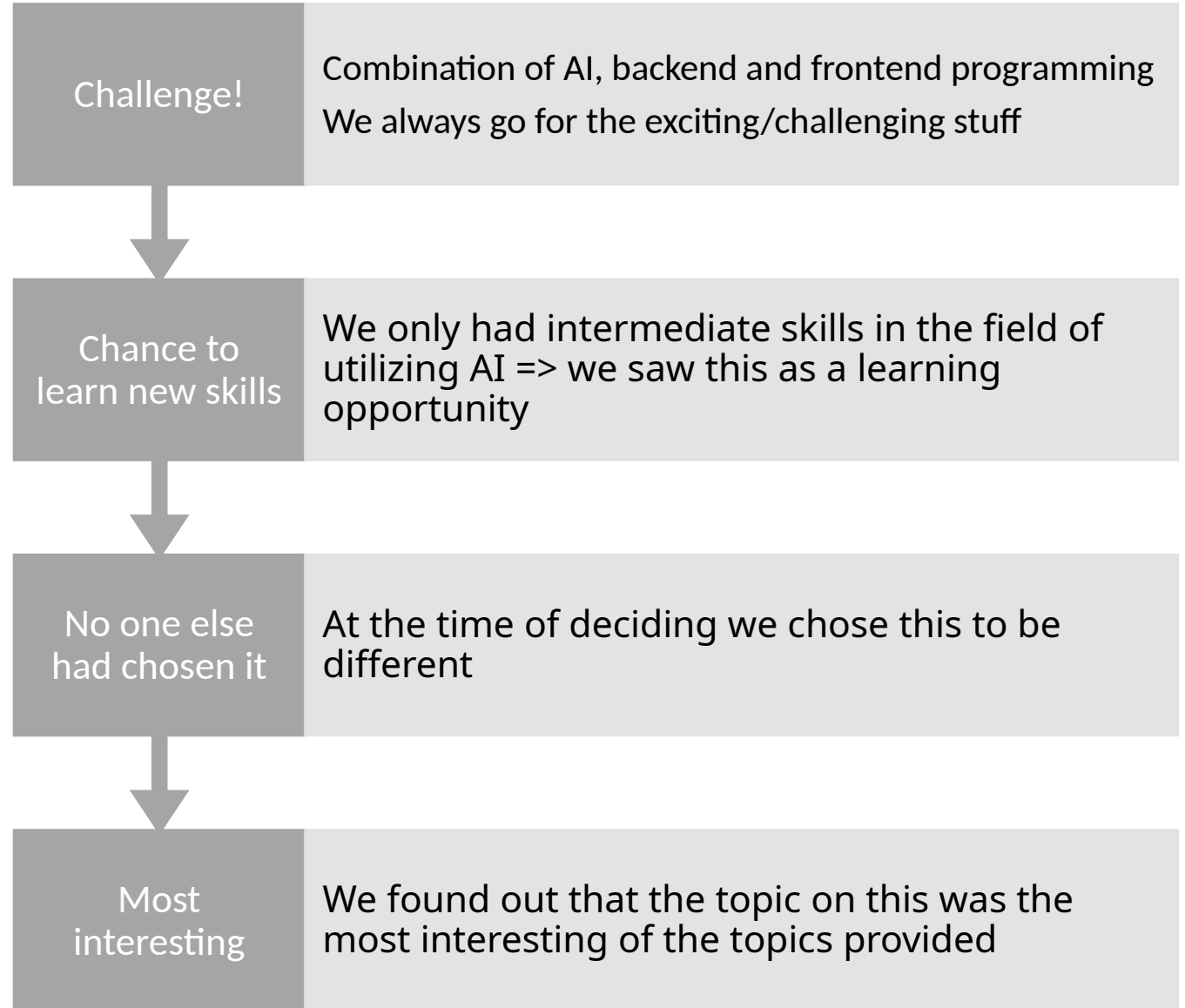Plantagen

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Energy Consumption Profiling Application

- Our objective was to create an Energy Consumption Profiler for the "Average Joe"

- Goals for the application
  - Show some sort of suggestions for the user on the UI
  - Give Joe information on their performance in energy usage

Why Challenge D?

Challenge!	Combination of AI, backend and frontend programming We always go for the exciting/challenging stuff
Chance to learn new skills	We only had intermediate skills in the field of utilizing AI => we saw this as a learning opportunity
No one else had chosen it	At the time of deciding we chose this to be different
Most interesting	We found out that the topic on this was the most interesting of the topics provided

Approach

Formulate questions the user wants answers to
  "When did I use the most/least energy"
  "Where should I shift my usage to"

Use ChatGPT:
  Give some basic information
  Upload the entire CSV file
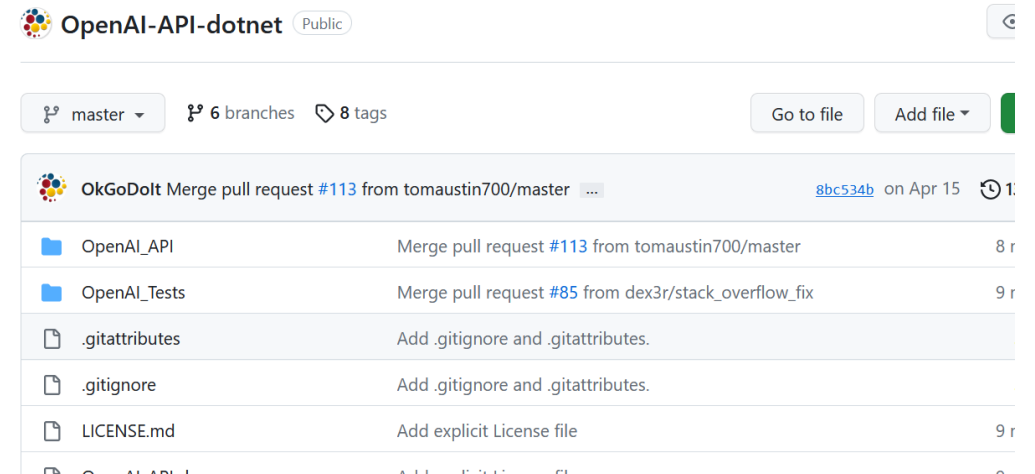 Ask how well the user managed their energy usage/times

  Give text-based feedback to the user
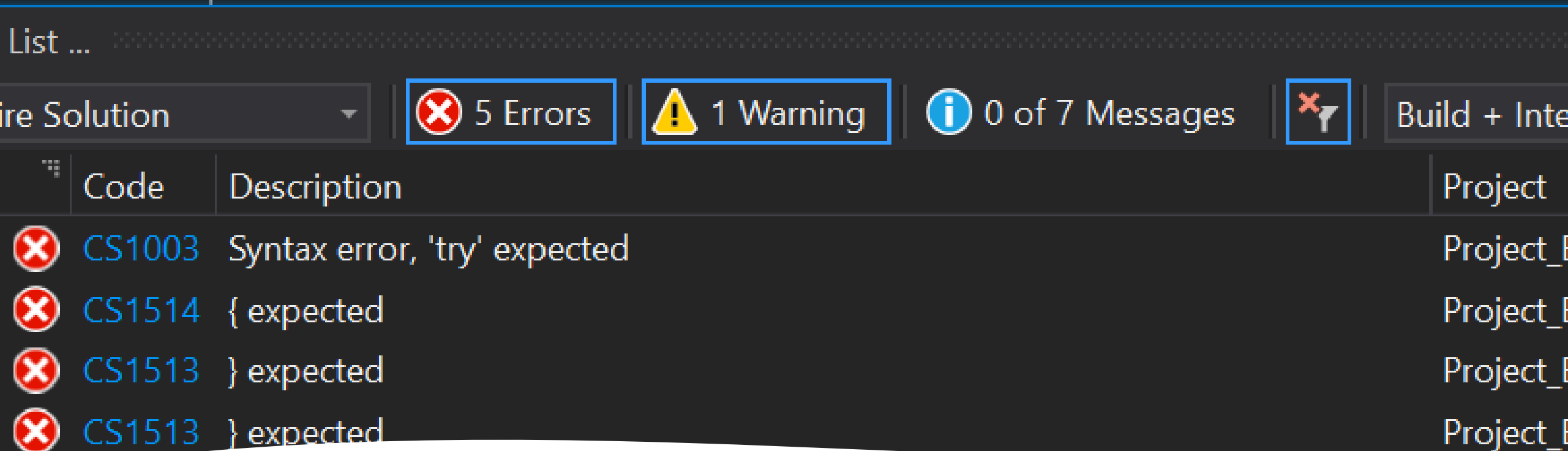
Choosing tools

- Github was already set up

- Decided to use C#

- Visual Studio 2019
  - ASP.NET Core project

- External libraries:
  - CSVHelper
  - OpenAI-API-dotnet by OkGoDoIt (Github)

List ...

ire Solution ▾ | ❌ 5 Errors | ⚠️ 1 Warning | ℹ️ 0 of 7 Messages | ✖️🔻 | Build + Inte

	Code	Description	Project
❌	CS1003	Syntax error, 'try' expected	Project_
❌	CS1514	{ expected	Project_
❌	CS1513	} expected	Project_
❌	CS1513	} expected	Project_

Challenges

- Where is the CSV?

- Unfamiliarity with .NET front end coding

- Can't upload the whole CSV (too large)!
  - o We'll need another way...

- Running out of time!

Results

Upload Your Energy Data

Select CSV File:

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Upload

OpenAI API works! — Can easily get answers to queries

Could upload the energy data CSV file to the application

No time to properly merge these

Foundation for functionality

Chosen tools and environment was perfect — Experience kept us from using it to full potential