Designing a Text File Analyzer Using Lambdas



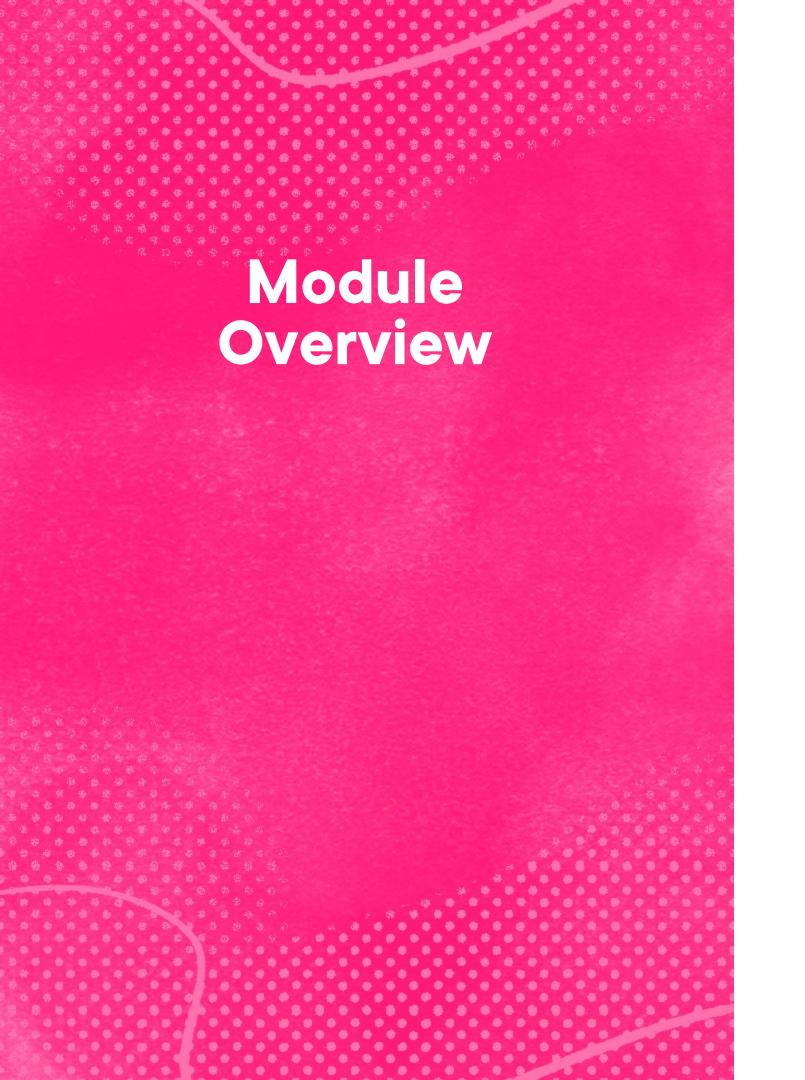
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Leveraging lambdas and streams to read and analyze a CSV file



How to read a CSV using a mapper

How to validate the data it contains using predicates

How to extract information from it

Using lambdas and method references to make your code as clean as possible

Reading a CSV File Using a Mapper

Reading a File Line by Line

How to read a text file line by line
And to map each line to a record

Handling Errors Properly

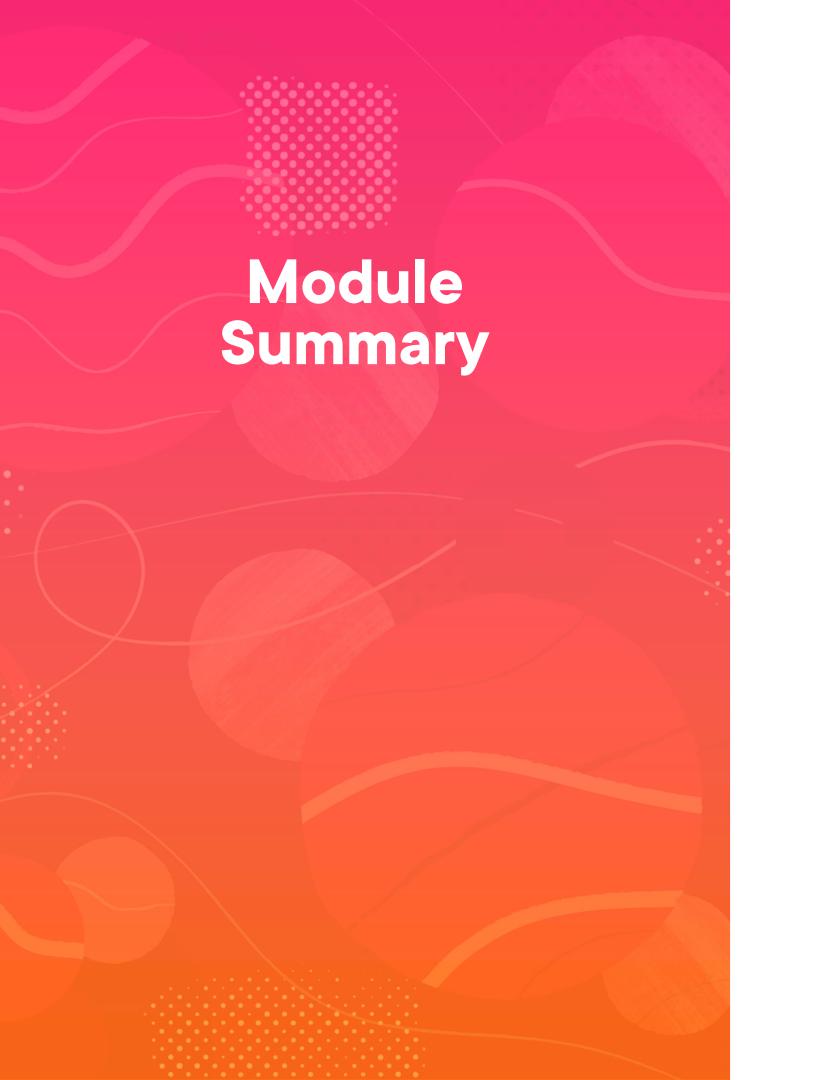
Validating Lines with Predicates

How to validate your data
With the tools the Stream API gives you
And proper lambdas

Analyzing the Data

Analyzing Your Data

Now that the file has been loaded How can you analyze the data it contains



How using lambdas can make your code easier to understand

Loading a file in memory

Processing data with the Stream API



How you can easily write lambdas:

- finding the type you need to implement
- implementing the right abstract method

How to use the four functional interfaces

- Supplier
- Consumer
- Predicate
- Function

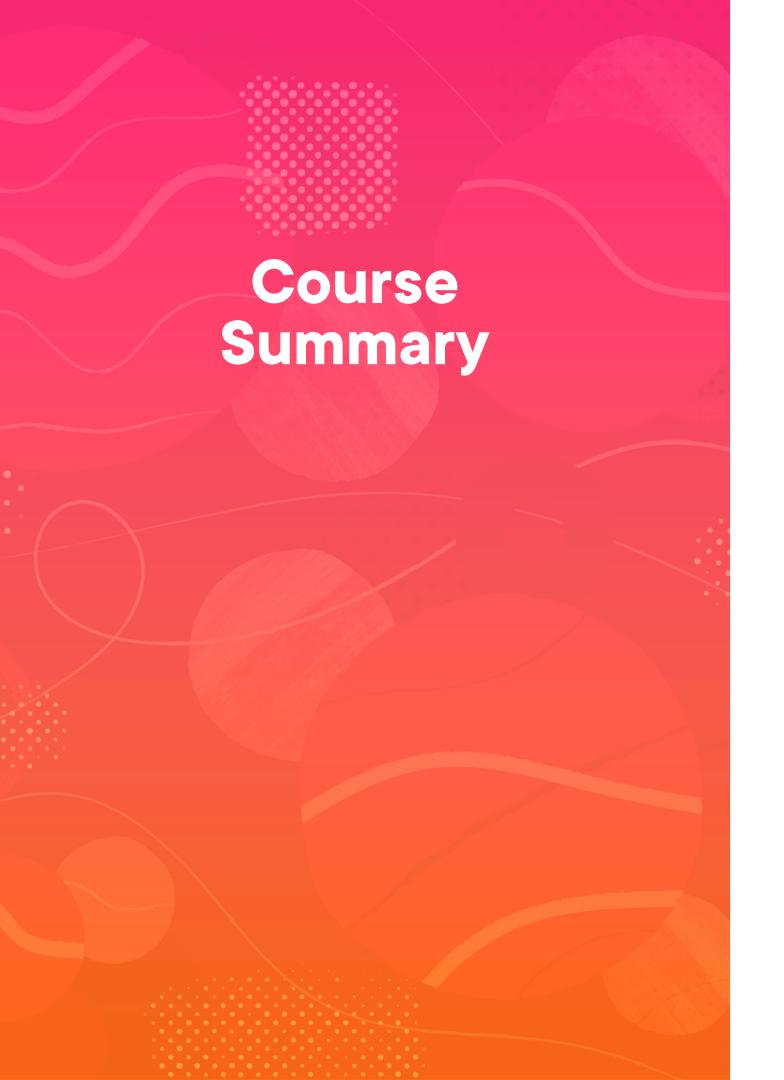


How you can use method references to improve the quality of your code

How you can create and combine lambdas

- using static methods
- and default methods

How you can design an API, following the Comparator interface example



At last, you saw a complete use case

Creating a clean data analysis tool

With proper error handling