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Agenda

- Problem Statement
- Solution
- Other Options
- Decisions
- Conclusion

Problem statement

- Prompt User For Inputs
- Display Greeting, Validate Their Date Of Birth And Calculate Age
- Convert Distance Into Distance Km To Miles
- Convert Age Into Different Units Of Time And Literals



Solution

- Create Different Classes To Handle Different Problems Defined In The Problem Statement
- **'Prompt'**: Handles User Input And Capitalizes Names
- **'DateValidator'**: Validates The Date Of Birth Input.
- **'NumberValidator'**: Checks If Input Is Numeric.
- **'MilesCalculator'**: Converts Distance From Kilometers To Miles.
- **'AgeCalculator'**: Calculates Age In Various Formats.



Other Options

- Using java libraries for date validation.
e.g. `SimpleDateFormat dateFormat = new
SimpleDateFormat("dd/MM/yyyy");`



Decisions

- Use String class **substring()** method to format names
- Use String class **split()** method to help validate the date
- Use Short circuit operators to help verify data type and format of inputs
- Use recursion to help handle invalid inputs
- Keep it simple with arithmetic calculations when converting Age
- Use java libraries to convert integers



Summary

- By implementing different methods and classes the problem was solved in a modular way
- During development, research was done and lessons were learnt through trial and error
- Through use, more decisions can be made about how the program and can be scaled
- Overall, the challenge helped as a means to further the understanding of data types, arithmetic calculations, methods and classes, as well java libraries.



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