**Programming Languages Project 3**

**Design and Documentation of a New Programming Language**

**Task:** Design a pedagogical programming language for Turkish students of programming. These may be high school or university students that are not necessarily studying for an IT-related profession. The language should be a nice starting point (first language) for who wishes to learn programming.

* Write a complete EBNF (or BNF) definition of the language’s syntax.
* Write a User’s Guide (in Turkish) that defines the syntax and the semantics of the language. (Like an e-book)
* Please note that the task does not cover the design or implementation of any compiler or interpreter. (only the language itself is to be designed)

**Deliverables:** A complete User’s Guide for the language, with the BNF syntax definition attached as an appendix. (upload to Egeders System)

**Team:** 1..4 people

**Deadline: 23rd June 2023 Friday**

**Please note that:**

* The language can be Object Oriented, but this is not a requirement. Feel free to design as you wish.
* Try to create original work. Refrain from the urge to steal an existing language’s design. Minimize any external *inspirations*. Try to show what a good language designer you are.
* Give your language a nice name and a logo
* The user is assumed to be a typical high school or university student of Türkiye, therefore the keywords within the language (if any) should be **in Turkish**.
* The User’s Guide should be **formal** and **complete** enough for anyone that may need to refer to it for the purpose of creating an implementation of the language (writing a compiler or an interpreter for it). Use detailed explanations and code examples when necessary.
* The User’s Guide should also be **user friendly**, and suitable for anyone who wishes to learn the language from scratch. Your language and writing style should be suitable for your target readers.
* There is not really a size expectation for this document. Content is what matters. Anything between 20..1000 pages would not be a surprise.
* Arrange the chapters of your User’s Guide as you wish. Make sure that there is an introduction section that states the purpose of the project.
* Any issue that is not referred by any restriction hereby, is subject to your freedom of design. On the other hand, freedom also means that you will be held responsible for the reasoning and sensibility of your design decisions. Better languages with better documents will get better grades (and an error-free work is not enough for getting a full grade). You should try to be better than the other teams.