Software Design I
Season 2024-I
Workshop No. 1 - Object-Oriented Programming

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Welcome to the first workshop of the *Software Design I* course. As you want to become in a sort of rock star developer, let's start the journey with this challenge.

You have been hired by a vehicle constructor company, we don't not how but that happens. You are on charge to create a new internal platform to define a catalog of vehicles.

Requirements are descibed as follows:

- Each vehicle has at least *engine*, *chasis* (`A` or `B`), *model*, *gas consumption*, and *year*. Depending on the vehicle type, you should define additional properties.
- There are different vehicle types (for now): *car*, *truck*, *yacht*, and *motorcycle*.
- Each engine has at least a *name*, *type of engine*, *potency*, and *weight*.
- To calculate the vehicle gas consumption you could create a method based on: $1.1 * engine.potency + 0.2 * engine.weight$ - (0.3 `if` A `or` 0.5 `if` B)

You must deliver a repository in *GitHub* where you must have a folder called `workshop-1`. There, you should let your *python code*, a simple *README* file as description of the folder, and a *technical report* in pdf format. Into the **technical report** a *class diagram* of your solution should be provided. Also, you must write about technical concerns and decisions you make to create the architecture of your proposed solution.

To verify everything is working fine, you must build a simple *command-line menu* to create engines, create vehicles, show all vehicles registered, and find a vehicle by year or engine potency.

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Any comment or concern related to this document could be send to Carlos A. Sierra at e-mail: *cavirguezs@udistrital.edu.co*