

Licenciaturas em Engenharia Informática

Modelação e Design

AULAS LABORATORIAIS – 2017 / 2018

FICHA 4 – CLASS DIAGRAMS

1. Identify the classes to adequately represent the following situations and construct the corresponding class diagrams:
 - a) A vehicle has an owner. An owner can have multiple vehicles.
 - b) A person has a name and a group of friends.
 - c) In the garden, plants grow. Plants can be trees (or not).
 - d) A group consists of several adventurers, who can be warriors, magicians or elves.
 - e) A race consists of a set of vehicles, which will compete on a track. Vehicles can be cars or motorbikes. Each vehicle has a driver. The lane consists of a sequence of interconnected segments. Each of these segments has a certain length and a turning angle. The race has a duration, measured in the "number of laps".
2. Identify the classes to adequately represent the following situation and construct the corresponding class diagram:
 - A text consists of several lines of text.
 - The font of the text is represented by the font name (for example, Arial) and its size (for example, example, 12pt).
 - The formatting of the text is represented by its source, the information about the colour and the alignment (left, right, centred or justified).
 - The text may contain different formatting in different zones. A zone is defined (for example) by a starting and ending point in the text.