

ITC515/205 Assignment 1-2 Resource Bundle Readme

Assignment 1-2 consists of a development task. You are required to develop some classes as a team, then subject your code to peer code review and combine your work into a working piece of software.

The software development task is based on the Barchester City Carpark case study. You may be familiar with this case study from ITC203. However, we will not be implementing the entire system. What we will be doing is a greatly simplified 'toy' version of the Carpark Ticketing system.

Specifically, we will NOT be implementing any of the operator assistance functionality, nor will we be implementing any fault recording, nor will we be implementing anything that tracks security visits or anything like that. We will be implementing control logic for entering and exiting the carpark using adhoc (regular) and season tickets, and also a very simplified version of paying for tickets at the paystation. Specifically, we will be supporting the use cases:

- A. Enter carpark
- B. Pay for Ticket
- C. Exit Carpark

You are supplied a number of resources to help you complete this task.

1. A code baseline. You are supplied a GUI framework, and skeletons for the classes you need to implement. The GUI classes are completely functional (although very basic).
2. A set of design documents. These include:
 - a. A set of use case descriptions to be supported.
 - b. A set of activity diagrams that illustrate the required use cases.
 - c. A set of state diagrams that illustrate the expected behaviour for the main controller classes.
 - d. A set of sequence diagrams illustrating use case realization' for some basic flows involved in the use cases we will be supporting. Note: not all flows are shown with use case realizations – you will have to figure out the other flows for yourself.
 - e. An analysis class diagram showing relationships between the classes in the system.
3. A Visual Paradigm XML project file than can be imported into VP (Version 14.1) with the diagrams.
4. The original case study for the Barchester City Carpark system. Note that this is only for context and background information. You are only required to implement the use cases as outlined in the design documents.
5. An iteration planning template to help you organise the task among team members.

Some comments on the task and case study:

- a) The classes that require implementation are indicated with a pink 'halo' in the analysis class diagram.
- b) The supplied code baseline will run and display the GUI but it wont execute to support the use cases – you are required to supply the implementation for that. However, you don't need to modify the GUI classes. You can if you want to, but you don't need to.
- c) You are not required to implement the payment and change logic for the paystation.
- d) For the purposes of this exercise, the exit pillar is assumed to require customers to remove their ticket in order for the exit barrier to raise. The exit pillar does not 'swallow' tickets.