

**CSIT115/CSIT815 Data Management and Security**  
**Laboratory 3**  
12 March 2018

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**Scope**

This laboratory is related to logical database modelling.

**Important messages**

**Please read the messages listed below before implementation of a task included in a specification of Laboratory 3.**

More implementation related information can be found in "How to ... ?" Cookbook available through Moodle or at:

<http://www.uow.edu.au/~jrg/115/COOKBOOK>.

The outcomes of Laboratory 3 are due by **Saturday, 31 March, 2018, 10.00 pm (sharp)**.

Laboratory 3 contributes to 2% of the total evaluation in the subject.

A submission procedure is explained at the end of this document.

Only one submission of Laboratory 3 is allowed and only one submission per student is accepted. Please make sure that you submit the correct files.

A submission that contains an incorrect file attached is treated as a correct submission with all consequences coming from the evaluation of the file attached.

Compressed (zipped, rared, tared, etc) files will not be evaluated.

A submission marked by Moodle as "late" is treated as a late submission no matter how many seconds it is late.

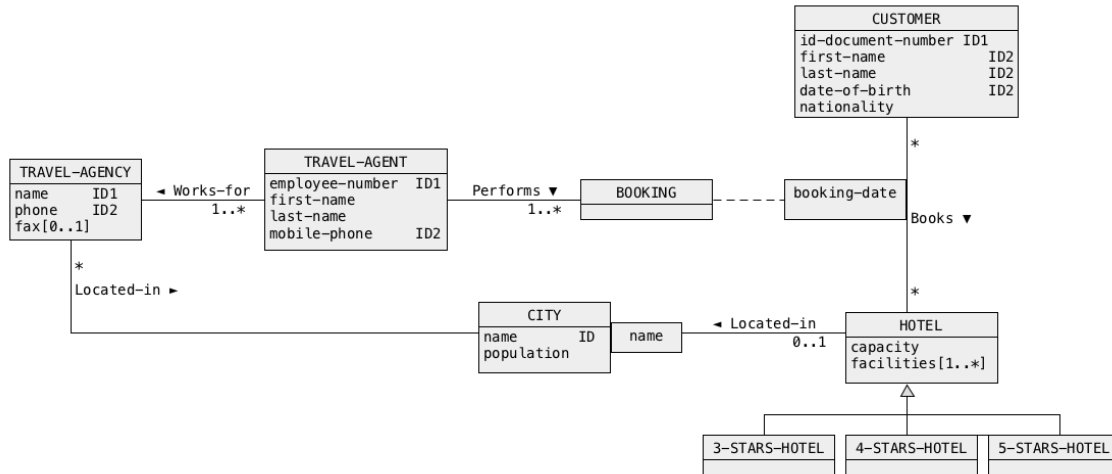
A policy regarding late submissions is included in CSIT115/815 Subject Outline.

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## Tasks

### Task1 (2 marks)

Consider a conceptual schema given below.



Your task is to perform logical database design, i.e. to transform a conceptual schema given above into a collection of relational schemas.

For each relational schema created clearly list the names of attributes, primary key, candidate keys (if any), and foreign keys (if any). Assume, that **superset method** must be used to implement a generalization (if any). A way how a conceptual schema can be transformed into a collection of relational schemas is explained in a presentation 06 Logical Design.

The relational schemas must be listed in a format presented in a slide 45 in a presentation 06 Logical Design. Listing of the relational schemas in the other format scores no marks.

### Deliverables

A file `solution1.pdf` with a list of relational schemas, primary key for each relational schema, candidate keys (if any) for each relational schema, foreign keys (if any) for each relational schema. Submission of a file with a different name and/or different extension and/or different type scores no marks.

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## Submission

Note, that you have only one submission. So, make it absolutely sure that you submit correct files with the correct contents. No other submission is possible !

Submit a file **solution1.pdf** through Moodle in the following way:

- (1) Access Moodle at **<http://moodle.uowplatform.edu.au/>**
- (2) To login use a **Login** link located in the right upper corner the Web page or in the middle of the bottom of the Web page
- (3) When logged select a site **CSIT115/DPIT115/CSIT815 (S118) Data Management & Security**
- (4) Scroll down to a section **Submissions**
- (5) Click at a link **In this place you can submit the outcomes of Laboratory 3**
- (6) Click at a button **Add Submission**
- (7) Move a file **solution1.pdf** into an area **You can drag and drop files here to add them**. You can also use a link **Add...**
- (8) Click at a button **Save changes**
- (9) Click at a button **Submit assignment**
- (10) Click at the checkbox with a text attached: **By checking this box, I confirm that this submission is my own work, ...** in order to confirm the authorship of your submission
- (11) Click at a button **Continue**

It is expected that a problem included within **Laboratory 3** will be solved **individually without any cooperation** with the other students. If you have any doubts, questions, etc. please consult your lecturer or tutor during lab classes or office hours. Plagiarism will result in a **FAIL** grade being recorded for that assessment task.

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*End of specification*