

CE/CZ2002 Assignment Grading Guide **(Hotel Reservation and Payment System (HRPS))**

ASSESSMENT WEIGHTAGE

UML Class Diagram [30Marks]

Show mainly the Entity classes, the essential Control and Boundary classes, and enumeration type (if there is).
Clarity, Correctness and Completeness of details and relationship.

Design Consideration [15 Marks]

Usage of OO concepts and principle - correctness and appropriateness

Implementation Code [35Marks]

Diagram to Code correctness, readability, Javanaming convention, exception handling, completeness of Java Doc and overall quality.

A Java API HTML documentation of ALL your defined classes using Javadoc must be submitted. The use of javadoc feature is documented in Appendix D.

Demonstration and report [20 Marks]

Coverage of application essentials and functionalities, user friendliness, demo flow, innovation.
Report structure and reflection

THE REPORT

Your report will include the following :

- A detailed UML Class Diagram for the application (exported as an image) show clearly the class relationship, notation notes to explain, if necessary
- A write-up on your design considerations and use of OO concepts.
Propose 2 new features as further enhancements and write a 2-3 lines description how each feature will be used.
Explain how your current design can cater to these 2 features- using the design principles (reusability, extensibility, SOLID, etc)
- Reflection: The difficulties encountered and the way to conquer, the knowledge learnt from this course, further improvement suggestion.

Class Diagram (30 marks)

Notes

- See the attached suggested class diagram (either versions or combination)
- These are **Entity** Classes for storing data – *usually nouns like Room, Guest, Car, etc.*
- Teams should have about the same classes.
- They may include Control and Boundary classes, eg HotelMgr, PaymentController, xxxUI, xxxForm)
- If you know about ER Diagram (Entity Relationship) in DB, you should be able to relate to the Class relationships.

Assessment Guideline :

if the class diagram is too messy and hard to read, deduct 2 marks

- **25-30marks**
 - List of classes SIMILAR suggested (+ 3 more is fine), with detail listing of attributes and methods, appropriate relations and clear
- **19-24marks**
 - List of classes LESS THAN suggested, with detail listing of attributes and methods, appropriate relations and clear
- **12-18marks**
 - List of classes LESS THAN suggested, with MINIMUM of attributes and methods, appropriate relations and clear
- **7-11 marks**
 - List of classes LESS THAN suggested, with MINIMUM of attributes and methods, SPIDER WEB –like (a class relate to a lot of classes) class relationships – using Dependency is fine (the dotted slim arrow ----->)
 - OR overused of <<Interface>> { more than 4)
- **3-6 marks**
 - Only Boundary or Control classes
- **0-2 marks**
 - No submission or irrelevant classes

Remarks :

(1) **Main assessment is the relationship between Entity classes.** Boundary and Control classes can be considered when they justified the usage in Design Consideration.

(2) **Likely Entity classes (or similar names) :**
Reservation, Room, Guest, RoomService(Order), MenuItem.

(3) **Only a few Interfaces but NOT majority**
DBInterface, PaymentInterface

(4) **Likely Control classes** (*should not be more than 4 without strong justification*)
*HotelApp (main)**, PaymentXXX*, RoomXXX*

Implementation (35 marks)

Notes

Deduct 7 marks if JavaDoc not available/submitted. (include as remarks in assessment sheet)

Assessment Guidelines

- a) **Able to compile** (0-5 marks)
- b) correctness of the program. (0-15 marks)
 - Sample 2 big Entity classes and check the codes implementation in the .java files (or verify using the JavaDoc) is as depicted in Class Diagram.
 - See the ppt slide on mapping diagram to code.
- c) presentation of the Java codes (whether the program is **properly indented**); (0-4 marks)
- d) **documentation of codes (whether the program is well commented to aid understanding) – including JavaDoc.**
Check the quality details of the Java Doc html. (0-8 marks)
- e) **naming convention** (camel style) - ***Class to be Uppercase*** for first letter eg Student, CourseInfo
method to be Lowercase for first letter, eg printResult (0-3 marks)

Design Consideration (15 marks)

Notes

- Purpose is to demonstrate their design ideas, concepts and approach taken
- Everything must be **written** in the context of this case studies and not just quote general 'principles' without tying it to classes used **in the assignment context**.
- How they design their text files to store the data is irrelevant BUT how the objects are used.
- **The consideration of reusability, maintainability and extensibility**
- Correct OO concepts need to be shown**.
- **Proposed 2 relevant feature/functions and explain it reasonably well** how it can be implemented to **MINIMISE impacts**

Assessment Guidelines

- Well written, have considered a number of design issues and applied design principles and OO concepts
10-15 marks
- Considerations make to most design issues with design principles and OO concepts applied.
 - but some ideas/concepts do not applied /used right
6-9 marks
- - Quote text or principles with **no mapping** to **assignment context**
 - too brief to read ideas
0-5 marks

**Remarks

It is **not necessary** to demonstrate the **use of inheritance and polymorphism** (IP) and they will **not be penalized**. If groups used and applied (IP) in the appropriate and logical context of the assignment, better marks can be given.

The handling of the reading and writing to/from file (FileIO) are a common way approach to applying inheritance and polymorphism – eg with a DBInterface (or Data Access Object, DAO) such that in future, it can be extended to read from DB, XML or json.

Demonstration and report [20 Marks]

Assessment Guidelines

- a) Coverage of application essentials and functionalities - demo stated functionality in the assignment doc
- b) user friendliness - show that application is designed and used in minimum data entry (eg using selection).
- c) demo flow - easy to follow and understand what is demo [from an audience perspectives trying to understand the demo]
- d) clarity of narration, video display and audio-video sync
- e) *Include showing of negative cases/error checking*
- f) *Strong demonstration of learning points and insights of good algorithm design and implementation practices, based on experience gained from doing the assignment.*

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|----------|--------------------------------|---------------------|--|
| a) to f) | All Satisfactory | 15-18 marks | |
| | ONE item Not Satisfactory only | 12-14 marks | |
| | | | |
| | Each item | 3 marks | |
| | Not satisfactory at all | 1-2marks | |
| g) | Innovation | add max of 2 | |

Deduct 2 marks if the video duration exceeded 15 minutes