

COMP 3004

Midterm Exam Solution -- Version 2

[out of 50 marks]

1. [1 mark] c
2. [1 mark] b
3. [1 mark] a
4. [1 mark] d

5. [3 marks]

Grading:

- 2 marks for correct example
 - must be based on inheritance and aggregation, not uses relationships
 - relationships must be between the classes of different subsystems, not just between subsystems
 - 0 marks for no classes, or for only 1 subsystem
 - 1 mark for only two correct subsystems
- 1 mark for explanation of coupling and how it relates to the diagram

6. [3 marks]

Grading:

- 2 marks for correct example
 - must be based on inheritance and aggregation, not uses relationships
 - relationships must be between the classes in the subsystems
- 1 mark for explanation of cohesion and how it relates to the diagram

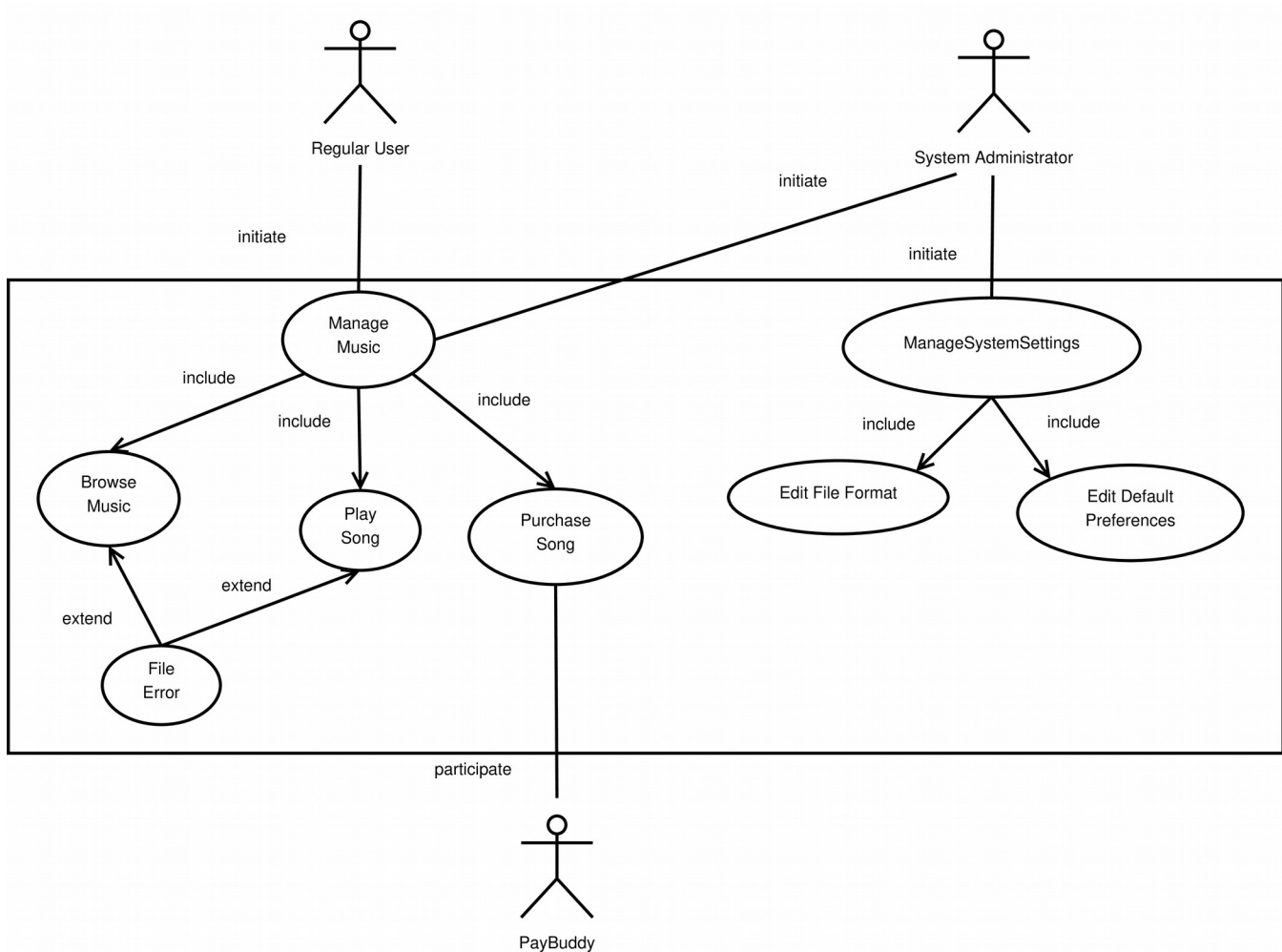
7. [40 marks]

- a. [6 marks]

Grading:

- 1 mark each requirement that makes sense
- 0 for non-functional requirements with no category, or with the wrong category

b. [15 marks]

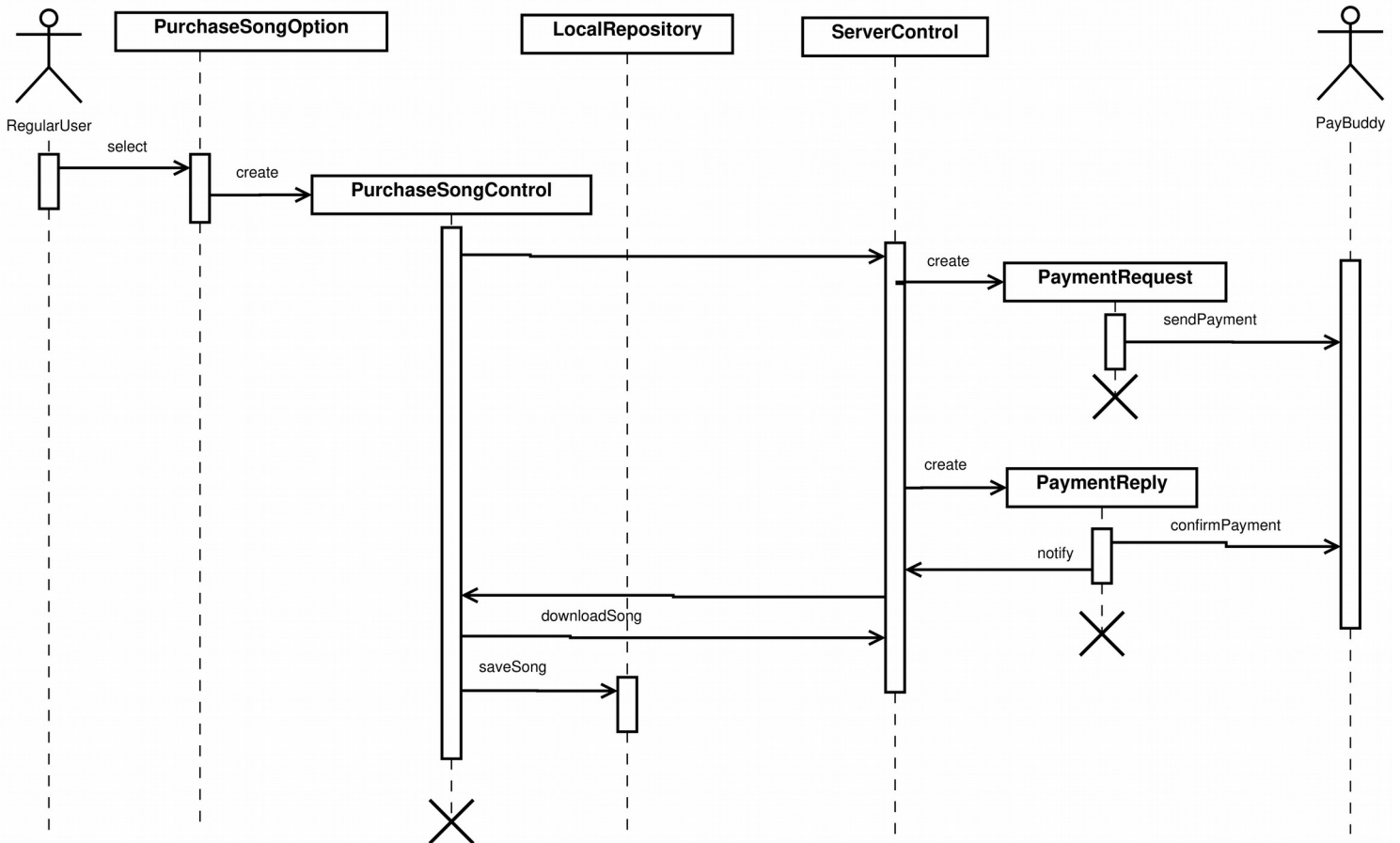


Grading:

- 1 mark: regular user actor with correct relationship
- 2 marks: system admin actor with correct relationships
- 2 marks: PayBuddy actor with correct relationship
- 1 mark: system boundary
- 2 marks: 1 each high-level use case
- 5 marks: 1 each detailed use case with correct relationship to high-level one
- 2 marks: extend use case with correct relationships

Deductions: -2 marks for each additional actor

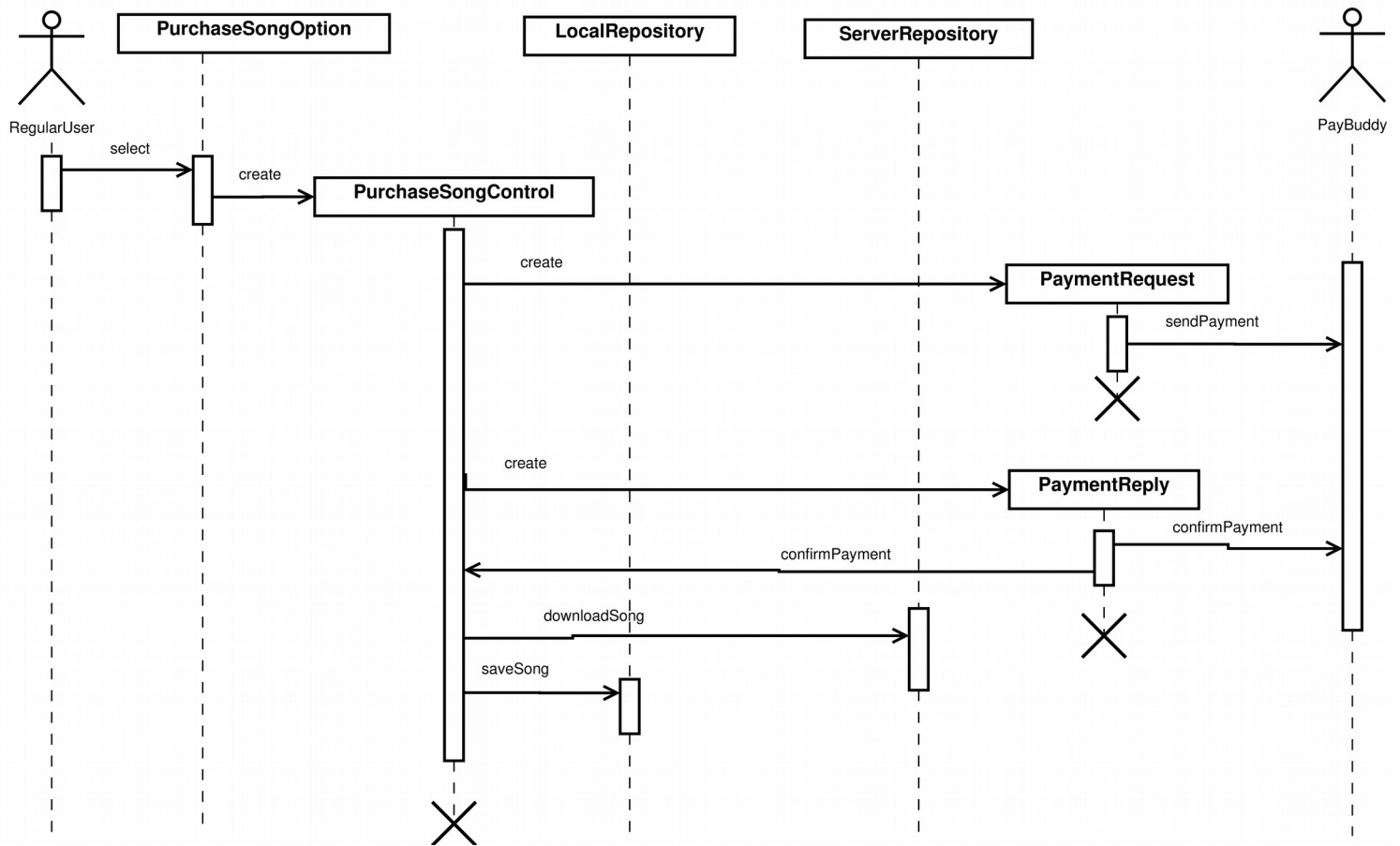
c. [19 marks] Option #1



Grading:

- 8 marks: 1 mark each actor and object
- 11 marks: 1 mark each operation, except 2 marks each download from server, save to repo

[19 marks] Option #2



Grading:

- 8 marks: 1 mark each actor and object
- 11 marks: 1 mark each operation, except 2 marks each download from server, save to repo