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| --- | --- | --- |
| **Grading Items** | **Point** | **Comment** |
| Document Organization (4 points) | **3** | You copy and paste the content but didn’t reorganize it in a proper way. For example, page break, title fonts, indentations, etc. Note that, you must produce a document that looks “professional”. |
| Class diagram (6 points)   * Generalization, association, aggregation * Multiplicity * Attributes and operations | **2** | * Class names are singular nouns. * You eliminate too many nouns, and some of them are relevant to your system. * Because the classes are identified in a wrong way, the attributes and operations don’t make sense to me. * The multiplicities are always one, and there is a class isolated without any associations. |
| **Total** | **5** |  |

**Network Authentication Utilizing Android Phone Application**

**404 Name Not Found**

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System Requirements:

1.**User**

IN-FN-01.The system shall allow a valid Phone number to be typed.

PROC-FN. The system shall allow the users to enter the phone number.

PROC-FN. The system shall validate if the phone number entered is valid.

IN-FN-02.The system should allow the user to Submit their phone number.

IN-FN-03.The system should allow the user to enter a Password.

OUT-FN-01. The system shall be able to display the Terms of use to the users.

OUT-FN-02.The system should allow the user to view their usage history for all their connected devices.

OUT-FN-03.The system should display denial reason if given through the system.

OUT-FN-04.The system should display the time remaining before another authentication is required.

2.**Administrator/server**

PROC-FN-01.The system shall have a usage history of all cell phone numbers.

PROC -FN-02.The system shall allow the administrator to edit terms of use.

PROC -FN-03.The system shall allow the administrator to set a default use time length.

OUT-FN-05.The system shall allow the administrator to give a denial reason for a failed authentication.

PROC-FN-04.The system shall allow the administrator to set individual users use time.

PROC-FN-05.The system shall allow the administrator to manage users.

PROC-FN-01.The system shall allow the administrator to set up web request forwarding control.

PROC-NF-06.The system shall allow the administrator to set privileges.

PROC-FN-02.The system shall allow the administrator to set administrator accepted IP addresses/phone numbers in initial configuration.

PROC-FN-02.The system shall allow the administrator to add or remove administrator devices.

PROC-NF-07.The system shall allow the administrator to block individual phone numbers from use.

PROC-NF-08.The system shall have a white list of users that aremanaged by the administrator.

PROC-NF-09.The system shall have a black list of websites managed by the administrator.

3.**Phone/Texting APP**

IN-FN-04.The system shall be able to receive text messages.

OUT-FN-05.The system shall be able tosend text messages.

PROC-NF-10.The system shall store texting history utilizing the users phone number.

PROC-FN-04.The system shall be able toreceive access requests.

PROC-FN-05.The system shall approve/deny access requests to specified router.

PROC-FN-06.The system shall be capable of managing administrator privileges: c, d, e, and j.

PROC-FN-07.The system shall automatically approve usage for a user.

PROC-FN-08.The system shall be capable of setting auto approve time.

PROC-FN-09.The system shall be able to set the default Gateway that this device approves.

PROC-FN-10.The system shall be able to manage a second network.

PROC-FN-11.The system shall store an auto accept history.

OUT-NF-06.The system shall send an auto accept push notification.

4.**Server**

PROC-NF-12.The system shall hold data about usage and approved users.

PROC-NF-13.The system shall hold a whitelist and blacklist.

PROC-FN-12.The system shall mange message communication.

List of Unique Nouns:

1. System
2. Cell Phone number
3. User
4. Password
5. Terms of use
6. Usage history
7. Devices
8. Time
9. Authentication
10. Administrator
11. Use Time Length
12. Denial Reason
13. Web request forwarding control
14. Privileges
15. IP Address
16. Configuration
17. Whitelist
18. Blacklist
19. Website
20. Text Messages
21. Texting History
22. Access Requests
23. Router
24. Auto Approve time
25. Gateway
26. Network
27. Auto Accept History
28. Push Notification
29. Data
30. Usage
31. Communication

***Class names are singular nouns!***

***You eliminate too many nouns, I believe you need to include some of them.***

Refined List of Classes

1. Texting
2. User Authentication
3. Push Notification
4. Server Communication
5. Send to Server
6. Request Listener Thread
7. Request Thread

***The multiplicities don’t make sense to me!***

***There is an isolated class which doesn’t have any associations!***

***Because you define the classes in a wrong way, so the attributes and operations don’t make sense.***

