**Problem Analysis**

**Functional requirements Assignment #1:**

1. Create a new subscriber.
2. Deactivate a subscriber.
3. Show the number of active subscribers for each type of client.
4. Show the name of the minor subscriber who has the highest number of hours willing to consume.

**Requirement # 1:**

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| --- | --- | --- | --- |
| Name or identifier | R1: Create a new subscriber. | | |
| Abstract | The system must allow the user to create a new subscriber. | | |
| Inputs | Input name | datatype | Selection or repeat condition |
| Id | String | If the id number has been registered before, it must be re-entered. |
| Full name | String | N/A |
| Age | Int | N/A |
| number of hours willing to consume | Int | N/A |
| Customer type | String | N/A |
| General activities necessary to obtain the results | 1. User: select from the menu (create a new subscriber). 2. System: Ask for subscriber information. 3. System: read subscriber information. 4. System: validate subscriber information. 5. System: save subscriber information. 6. System: show “subscriber registered” | | |
| Result or postcondition | User registration in the systems. | | |
| Outputs | Output name | datatype | Selection or repeat condition |
| successful process message | String | If the subscriber has been successfully registered in the system. |

**Requirement # 2:**

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| --- | --- | --- | --- |
| Name or identifier | R2: Deactivate a subscriber. | | |
| Abstract | The system must allow the user to deactivate a subscriber, if it happens the subscriber will lose the level type of client, returning to Normal. | | |
| Inputs | Input name | datatype | Selection or repeat condition |
| Id | String | If the id number doesn´t exist, it must be re-entered. |
| General activities necessary to obtain the results | 1. User: select from the menu (Deactivate a subscriber). 2. System: Ask for the Id of the subscriber that will be deactivated. 3. System: read Id. 4. System: validate that the id exists. 5. System: deactivate the subscriber and return the level type to NORMAL. 6. System: show “Subscriber deactivated” | | |
| Result or postcondition | Deactivation of the subscriber in the system and new level type for the subscriber. | | |
| Outputs | Output name | datatype | Selection or repeat condition |
| successful process message | String | If the subscriber has been successfully deactivated int the system. |

**Requirement # 3:**

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| --- | --- | --- | --- |
| Name or identifier | R3: Show the number of active subscribers of each client type. | | |
| Abstract | The system must allow the user consult the number of active subscribers of each client type. | | |
| Inputs | Input name | datatype | Selection or repeat condition |
| N/A | N/A | N/A |
| General activities necessary to obtain the results | 1. User: select from the menu (Show the number of active subscribers). 2. System: Show the number of active subscribers. 3. System: Show the number of active subscribers of type NORMAL, PLATINUM AND DIAMOND. | | |
| Result or postcondition | N/A | | |
| Outputs | Output name | datatype | Selection or repeat condition |
| Active subscribers | Int | N/A |
| Normal active subscribers | Int | N/A |
| Platinum active subscribers | Int | N/A |
| Diamond active subscribers | Int | N/A |

**Requirement # 4:**

|  |  |  |  |
| --- | --- | --- | --- |
| Name or identifier | R4: show the name of the minor subscriber who has the highest number of hours willing to consume | | |
| Abstract | The system must allow the user consult the name of the minor subscriber who has the highest number of hours willing to consume. | | |
| Inputs | Input name | datatype | Selection or repeat condition |
| N/A | N/A | N/A |
| General activities necessary to obtain the results | 1. User: select from the menu (Show the name of the minor subscriber who has the highest number of hours willing to consume). 2. System: Show the number the name of the minor. | | |
| Result or postcondition | N/A | | |
| Outputs | Output name | datatype | Selection or repeat condition |
| Name of the minor | String | If there is a minor subscriber registered in the system. |