Análisis requerimientos : Johan Jojoa A00377905

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| Name or identifier | R01 – Generate a list with the available mini rooms. | | |
| Abstract | It allows to show the user a list that contains information about all the mini rooms available for rent. | | |
| Inputs | Input name | Type | Selection or repeat condition |
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| General activities | 1. Go through all the mini rooms. 2. Show the data for each of the available mini rooms. | | |
| PostConditions | * A list is displayed containing information on all the available mini rooms. * Alternative message:   + “There are no mini rooms available. " | | |
| Outputs | Output name | Type | Selection or repeat condition |
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| Name or identifier | R02 – Rent a mini room. | | |
| Abstract | This allows the user, be it a company or a research project, to rent a mini room. | | |
| Inputs | Input name | Type | Selection or repeat condition |
| company | boolean | --- |
| ownerId | String | --- |
| wantWindow | int | It must be 1 or 2. |
| roomNumber | Int | It must be an available room. |
| hostedServers | int | It can’t be lower than 0. |
| cacheMemory | double | It can’t be lower than 0. |
| processors | int | It can’t be lower than 1. |
| brand | int | It can’t be lower than 0. |
| ramMemory | double | It can’t be lower than 0. |
| discs | int | It can’t be lower than 0. |
| diskCapacity | double | It can’t be lower than 0. |
| General activities | 1. Ask the user for the data. 2. Validate if the data meets the selection conditions. 3. Calculate the value of the monthly rent. 4. Show the result to the user. | | |
| PostConditions | * A message that expresses the correct rental of the mini room, in addition to the monthly amount to be paid for the rent. * Error message:   + “Error: Option not available.”   + “Error: No room for more users.”   + “Error: There are no mini rooms available. "   + “Error: That mini room is not available. "   + “Error: that mini room does not exist ."   + “Error: The project already has a mini room.”   + “Error: The hosted servers can’t be lower than 0. "   + “Error: The cache memory can’t be lower than 0.”   + “Error: The processors can’t be lower than 1.”   + “Error: The RAM memory can’t be lower than 0.”   + “Error: The discs can’t be lower than 0.”   + “Error: The disk capacity can’t be lower than 0.” | | |
| Outputs | Output name | Type | Selection or repeat condition |
| totalRent | double | --- |

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| Name or identifier | R03 – Cancel a rent. | | |
| Abstract | This allows the user, be it a company or a research project, to cancel the rental of a mini room or all associated mini rooms. | | |
| Inputs | Input name | Type | Selection or repeat condition |
| decision | int | It must be 1 or 2. |
| companyName | String | It must be a registered company. |
| roomNumber | Int | It must be an available room. |
| General activities | 1. Ask the user for the data. 2. Validate if the data meets the selection conditions. 3. Show the prosecution capacity to the user. 4. Validate if the user really wants to cancel the rental. 5. Change the selected mini room status to available. | | |
| PostConditions | * A message that expresses the correct cancel of the rental of the mini room or mini rooms. * Error message:   + “Error: Option not available.”   + “Error: Company nit not found. "   + “Error: Project registry number not found. "   + “Error: This room is empty .” | | |
| Outputs | Output name | Type | Selection or repeat condition |
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| Name or identifier | R04 – Show a datacenter map. | | |
| Abstract | It allows the user to view a map of the datacenter, where they can identify which rooms are on and which are not. | | |
| Inputs | Input name | Type | Selection or repeat condition |
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| General activities | 1. Go through all the mini rooms. 2. Print the user a map of the mini rooms. | | |
| PostConditions | * A map representing the rooms in the data center is displayed on the screen, showing which rooms are currently on and off. | | |
| Outputs | Output name | Type | Selection or repeat condition |
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| Name or identifier | R05 – Pretend to turn on all the rooms. | | |
| Abstract | It allows the user to simulate turning on all the rooms, regardless of their status. | | |
| Inputs | Input name | Type | Selection or repeat condition |
| apply | Int | It must be 1 or 2. |
| General activities | 1. Go through all the mini rooms. 2. Power on each of the mini rooms. 3. Ask the user if they want to apply the changes. | | |
| PostConditions | * A map representing the rooms in the data center is displayed on the screen, showing which rooms are currently on and off. * If the user accepts, the changes will be applied to the real system. | | |
| Outputs | Output name | Type | Selection or repeat condition |
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| Name or identifier | R06 – Simulate the switching off of the mini rooms according to a letter entered. | | |
| Abstract | This allows the user, be it a company or a research project, to cancel the rental of a mini room or all associated mini rooms. | | |
| Inputs | Input name | Type | Selection or repeat condition |
| desiredLetter | String | It only can be “L”, “Z”, “H”, “O”, “M” or “P”. |
| desiredRow | Int | It must be between 1 and 8. |
| desiredColumn | Int | It must be between 1 and 50. |
| apply | Int | It must be 1 or 2. |
| General activities | 1. Ask the user for the data. 2. Validate if the data meets the selection conditions. 3. Go through all the mini rooms. 4. Power off each of the desired mini rooms. 5. Print the user a map of the mini rooms. 6. Ask the user if they want to apply the changes. | | |
| PostConditions | * A map representing the rooms in the data center is displayed on the screen, showing which rooms are currently on and off. * If the user accepts, the changes will be applied to the real system. * Error message:   + “Error: Option not available.” | | |
| Outputs | Output name | Type | Selection or repeat condition |
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