**REQUERI**M**IENTS:**

The system must be in the ability of:

R1: Register a new user that hasn't been registered with their document type, document number, name, last name, phone number, direction. The program doesn't allow to create new users with the same code. Is required that you enter at least the document type, document number, name, and last name, to create a new user with the data entered

R2: Manage shift:

2.1 Advance turns as the employee attends clients, according to the turn that has been provided to the client. Each employee can indicate if a client was attended with the turn or else wasn't attended because that person wasn't in the place at the time of the call.

2.2 Assign a turn to one person that is searched by its document number, each turn is formed by a letter between A and Z and a number between 00 and 99, When it reaches 99 goes to the next letter of the alphabet, starting again with 00. (Example: B99, the next one would be C00). After that, it shows the turn on the screen.

2.3 Search a turn assigned to a user that has been searched with the document number, if a client has a turn active, shows it to that person and doesn't create a new one. If that person doesn't have a turn, generate a new one and show it on screen.

**Test design:**

**EMPLOYEE:**

**Stages:**

|  |  |  |
| --- | --- | --- |
| **Name** | **Class** | **Stage** |
| SetupStage1 | TestEmployee | A new client ("CC", "3186170", "Amanda", "Rojas", "4388786", "Cra 12 E #50-45") |
| SetupStage2 | TestEmployee | Empty, no clients added |
| SetupStage3 | TestEmployee | A new client ("CC", "1005706215", "Fernanda", "Rojas", "4388786", "Cra 12 E #50-45") and assigned a turn to this client |
| SetupStage4 | TestEmployee | A new client ("CC", "1005706215", "Fernanda", "Rojas", "4388786", "Cra 12 E #50-45") but doesn’t have a turn assigned |
| SetupStage5 | TestEmployee | Empty, no clients added |

**Test case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Class** | **Method** | **Stage** | **Entry** | **Result** |
| Employee | SearchClient() | SetupStage1() | none | NullPointerException |
| Employee | AddClient() | SetupStage1() | addClient("CC", "3186170", "Amanda", "Rojas", "4388786", "Cra 12 E #50-45") | ExceptionAlreadyExists |
| Employee | GetClients() | SetupStage2() | none | true |
| Employee | GetClients() | SetupStage1() | none | There are clients in the arraylist |
| Employee | SearchClient() | SetupStage1() | “3186170” | Not null, client it’s found |
| Employee | SearchClient() | SetupStage1() | “1005706215” | Null, doesn’t exist the client |
| Employee | SearchClient() | SetupStage2() | “3186170” | Null, array it’s empty |
| Employee | SearchClient() | SetupStage1() | “1005706215” | Not null, the client it’s found |
| Employee | GetClients() | setupStage3() | none | True, it’s active |
| Employee | AssignTurn()  GetClients() | setupStage4() | “1005706215” | True, it generate a turn for the client |
| Employee | AdvanceTurn()  GetLast() | SetupStage2() | null | “A02” |
| Employee | AdvanceTurn()  GetLast() | SetupStage2() | null | “A00” |
| Employee | AdvanceTurn()  GetLast()  SetLetter() | setupStage5() | null | “E00” |
| Employee | AdvanceTurn()  GetLast()  SetLetter() | setupStage5() | null | “A00” |
| Employee | AdvanceTurn()  GetLast()  wasAttended() | setupStage3() | null | True |
| Employee | AdvanceTurn()  GetLast()  wasAttended() | setupStage3() | null | True  True, the turn advanced when a client was attended |

**TURN:**

|  |  |  |
| --- | --- | --- |
| **Name** | **Class** | **Stage** |
| SetupStage1 | TestTurn | A new Turn(“C99”) |
| SetupStage2 | TestTurn | null |

**Test case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Class** | **Method** | **Stage** | **Entry** | **Result** |
| Turn | SetLast()  GetLast()  AdvanceTurn() | SetupStage1() | none | “D00” |
| Turn | GetLetter() | SetupStage1() | none | "C99” |
| Turn | SetLast()  GetLast()  AdvanceTurn() | SetupStage2() | none | “A00” |
| Turn | IsStatus() | SetupStage2() | none | false |
| Turn | IsStatus()  SetLast()  SetStatus | SetupStage1() | none | true |