```
<<interface>>
                                                             Sistema
+readUserRegistry(users: ArrayList<User>): void
+login(user: String, password: String): boolean
+sigin(username: String ,name: String, email: String,contact: String,password: String): boolean
+getUserByName(username: String): User
+getProductById(int id): Product
+addProductToShop(name: String, category: String, price: int, description: String, imagePath: String, sellerUser: User): User
+getProductData(filter: String) : Object[][]
+getUserPosts(user: User): Object[][]
+scaleImage(path: String, width: int, height: int): ImageIcon
+saveChanges(users: ArrayList<User>): void
                                              <<implements>>
                                                          Sistemalmpl
                                                 - users: ArrayList<User>
                                                 - products: ArrayList<Product>
                                                                                                                        *
           *
                                                                                                               Product
               User
                                                                                                    - id: int
  - username : String
                                                                                                   - name: String
  - name: String
                                                                                                   - category: String
  - email: String
                                                                                                    - price: int
  - contact: String
                                                                                                    - description: String
                                                                                            *
  - password: String
                                                                                                    - imagePath: String
  - posts: ArrayList<Product>
                                                                                                    - date: String
  - compras: ArrayList<Product>
                                                                                                    - seen: String
                                                                                            *
                                                                                                    - sellerUser: User
  +User()
  +addPost(p: Product)
                                                                                                    +Product()
  +Getters & Setters
                                                                                                    +getData(): (data: String[])
                                                                                                    +Getters & Setters
```