

@startuml clases

hide circle

hide empty members

```
class Interface {
    +showResult()
}
class Login {
    -username: String
```

```
-password: String
 +validateCredentials()
 +searchClientData()
}
class Database
class Calendar {
 +showCalendar(id)
 +saveAnnouncement(announcementId)
+searchAnnouncement(announcementId)
}
class Announcement {
 -announcementId: int
 -event: Event
 -date: Date
 +getAnnouncement(announcementId, message, date)
}
class Event {
 -title: String
 -date: Date
 -description: String
 +getDataEvent()
 +createNewEvent()
}
class Research {
```

```
-topic: String
 +getDataPublish()
 +createNewPublish()
}
class Register {
 -username: String
 -password: String
 +createNewUser(username, password)
}
class User {
 -id: String
 -name: String
 -password: password
 +submitClientData(id, password)
 +getClientData()
}
class Password {
 -passwordHash: String
 +hashPassword(password)
 +validatePassword(password, hash)
}
Interface < | -d- Login
Interface < | -d- Register
Interface < | -- Calendar
```

User -u- Login

User -u- Register

User -- Database: "saved"

User -- Event : "creates"

Event -- Calendar: "saves"

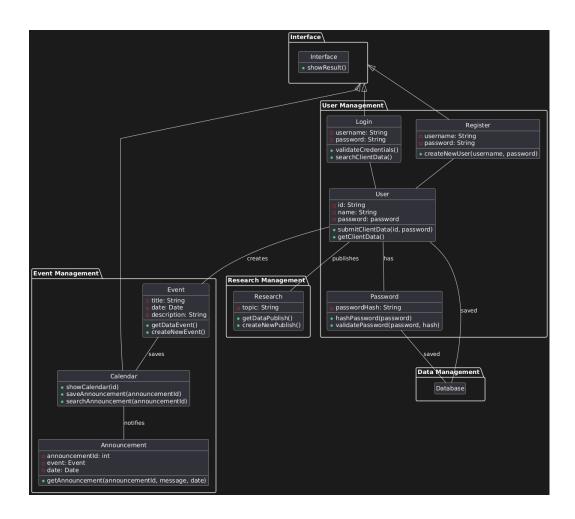
Calendar -- Announcement : "notifies"

User -- Research : "publishes"

Password -- Database: "saved"

User -- Password: "has"

@enduml



```
@startuml paquetes
hide circle
hide empty members
package "User Management" {
 class User {
  -id: String
  -name: String
  -password: password
  +submitClientData(id, password)
  +getClientData()
 }
 class Register {
  -username: String
  -password: String
  +createNewUser(username, password)
 }
 class Login {
  -username: String
  -password: String
  +validateCredentials()
  +searchClientData()
 }
 class Password {
  -passwordHash: String
```

```
+hashPassword(password)
  +validatePassword(password, hash)
}
}
package "Data Management" {
 class Database
}
package "Event Management" {
 class Event {
  -title: String
  -date: Date
  -description: String
  +getDataEvent()
  +createNewEvent()
 }
 class Calendar {
  +showCalendar(id)
  +saveAnnouncement(announcementId)
  +searchAnnouncement(announcementId)
 }
 class Announcement {
  -announcementId: int
  -event: Event
  -date: Date
  +getAnnouncement(announcementId, message, date)
```

```
}
}
package "Research Management" {
 class Research {
  -topic: String
  +getDataPublish()
  +createNewPublish()
 }
}
package "Interface" {
 class Interface {
  +showResult()
 }
}
Interface < | -d- Login
Interface < | -d- Register
Interface < | -- Calendar
User -u- Login
User -u- Register
User -- Database: "saved"
User -- Event : "creates"
Event -- Calendar: "saves"
Calendar -- Announcement : "notifies"
```

User -- Research : "publishes"

Password -- Database : "saved"

User -- Password : "has"

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