

# Lesson 21: The Identity Object

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*As a System Admin I want to view the names and surnames of System Admins as they have entered it on their user profiles.*

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## Lesson Outcomes

After this lesson you should know how to use the [Identity](#) built-in object.

## New & Modified App Files

`./web-app/presenters/user_management/SystemAdminUserMgmt.mez`

`./web-app/views/user_management/SystemAdminUserDetails.vxml`

## Definition

The [Identity](#) object is an implicit interface that is implemented by every persistence object in your application that has a `@Role` annotation. This object has the following implicit declaration:

```
1  object Identity {
2      string _firstNames;
3      string _nickName;
4      string _surname;
5      string _locale;
6      string _timeZone;
7  }
```

## Populating the Identity Object

Attributes of the [Identity](#) object are automatically populated from the information users update on their profiles. You see this profile screen when you exit the app by clicking on "More Apps" on the right-hand corner mouseover menu. These details apply server wide, and are not app specific.

Update Profile

Personal Info

Title: Prof

First name: Norman

Surname: Lockyer

Email address: noreply@mezzanineware.com

Birth date: 1836-05-17

Gender: Male

Language: English

Time zone: Europe/London

Save changes

Outside of above context, the Identity object and all of its attributes are read-only.

## Accessing Identity Attributes from Custom Objects

When displaying a system administrator's details (see [Lesson 2](#) and [Lesson 3](#)), we'll give precedence to a user's profile information (which they would have entered themselves) over the values entered when they were invited. Since all persistent custom objects with `@Role` annotations implement the `Identity` object we can access the `Identity` attributes directly from such custom objects.

We can therefore change the `SystemAdminUserMgmt` unit and `SystemAdminUserDetails` view as below to check first if the user has entered a name and/or surname on his profile, and if so, display that instead.

```

1  string systemAdminFirstName;
2  string systemAdminLastName;
3
4  .
5  .
6  .
7  void initViewDetails() {
8      if (selectedSystemAdmin._firstNames != null) {
9          systemAdminFirstName = selectedSystemAdmin._firstNames;
10     } else {
11         systemAdminFirstName = selectedSystemAdmin.firstName;
12     }
13     if (selectedSystemAdmin._surname != null) {
14         systemAdminLastName = selectedSystemAdmin._surname;
15     } else {
16         systemAdminLastName = selectedSystemAdmin.lastName;

```

```

17     }
    }

```

```

1  <view label="view_heading.system_admin_user_details" u
2  .
3  .
4  .
5      <info label="info.first_name">
6          <binding variable="systemAdminFirstName" />
7      </info>
8      <info label="info.last_name">
9          <binding variable="systemAdminLastName" />
10     </info>

```

## Accessing Identity Attributes from the Identity Object

As mentioned earlier, the `Identity` object is read-only. It cannot be directly instantiated by `Identity.new()`. However, the compiler can implicitly convert any custom persistent object with a `@Role` annotation to an `Identity` object instance. The following changes to `SystemAdminUserMgmt` would have achieved the same as the previous approach:

```

1  string systemAdminFirstName;
2  string systemAdminLastName;
3  .
4  .
5  .
6  void initViewDetails() {
7      Identity identity = selectedSystemAdmin;
8      if (selectedSystemAdmin._firstNames != null) {
9          systemAdminFirstName = identity._firstNames;
10     } else {
11         systemAdminFirstName = identity.firstName;
12     }
13     if (selectedSystemAdmin._surname != null) {
14         systemAdminLastName = identity._surname;
15     } else {
16         systemAdminLastName = identity.lastName;
17     }
18 }

```

## Lesson Source Code

[Lesson 21.zip](#)

No labels