Album

```
C 🔒 Album
```

f 🔒	serialVersionUID	long
f 🔒	name	String
f 🔒	photos	List<Photo>
f 🔒	start	Date
f 🔒	end	Date

m 🔒	Album(String)	

m 🔒	addPhoto(Photo)	boolean
m 🔒	removePhoto(Photo)	boolean
m 🔒	updateDates()	void
m 🔒	getName()	String
m 🔒	setName(String)	void
m 🔒	setPhotos(List<Photo>)	void
m 🔒	getStartString()	String
m 🔒	getStart()	Date
m 🔒	setStart(Date)	void
m 🔒	getEndString()	String
m 🔒	getEnd()	Date
m 🔒	setEnd(Date)	void
m 🔒	getPhotos()	List<Photo>
m 🔒	toString()	String
m 🔒	getNumPhotos()	int
m 🔒	equals(Album)	boolean

Photo

```
C 🔒 Photo
```

f 🔒	serialVersionUID	long
f 🔒	dateTaken	Date
f 🔒	tags	List<Tag>
f 🔒	tagTypes	HashMap<String, Boolean>
f 🔒	caption	String
f 🔒	photoFile	File
f 🔒	path	String

m 🔒	Photo(String, File)	

m 🔒	getTagTypes()	HashMap<String, Boolean>
m 🔒	getDateTaken()	Date
m 🔒	getTags()	List<Tag>
m 🔒	getCaption()	String
m 🔒	setCaption(String)	void
m 🔒	getPhotoFile()	File
m 🔒	addTag(Tag)	boolean
m 🔒	deleteTag(Tag)	boolean
m 🔒	getDateString()	String
m 🔒	equals(Object)	boolean

1..n ——————— *0..**

has   *is in*

User

```
C 🔒 User
```

f 🔒	serialVersionUID	long
f 🔒	username	String
f 🔒	albums	List<Album>

m 🔒	User(String)	

m 🔒	getAlbums()	List<Album>
m 🔒	setAlbums(List<Album>)	void
m 🔒	getUsername()	String
m 🔒	toString()	String
m 🔒	equals(User)	boolean

0..1 ... *belongs to* ... *1..n* ... *has*

1..n ... *tagged with* ... *tag* ... *0..n*

Tag

```
C 🔒 Tag
```

f 🔒	serialVersionUID	long
f 🔒	name	String
f 🔒	value	String

m 🔒	Tag(String, String)	

m 🔒	getName()	String
m 🔒	getValue()	String
m 🔒	equals(Object)	boolean
m 🔒	toString()	String

JavaFx Classes

© 🔒 Controller

© 🔒 UserSystemController

© 🔒 AdminSystemController

© 🔒 LoginController

© 🔒 SlideshowController

© 🔒 PhotoSystemController
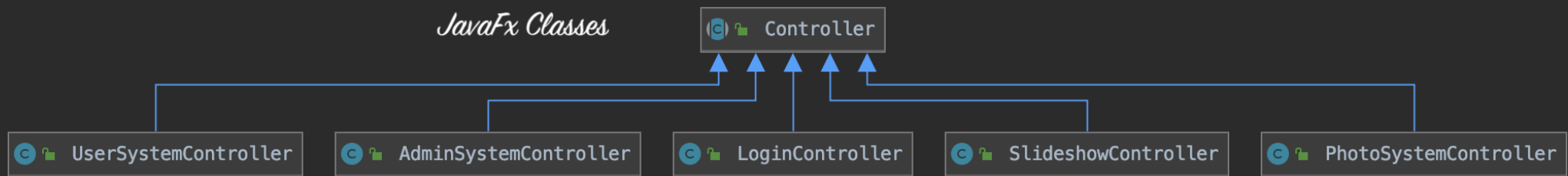
Associations

Classes	Data Structure used for Class
User	List<Album> album
Album	List<Photo> photos
Photo	List<Tag> tags
Tag	None, this class is used to represent key-value pair