

J2ME MVC

MVC Model-View-Controller [] UI [] MVC Model View [] Controller [] []

MVC [] - J2ME[awv1] MVC J2ME[awv2]

startApp() pauseApp() destroyApp() HelloWorld [] MVC

//Code example, items shared in different views

public void commandAction(Command cmd,Displayable disp)

{

```
if(cmd == getCommand &&currentView==mainForm) then
```

```
{.
```

```
else if(cmd == getCommand &&currentView==listForm) then
```

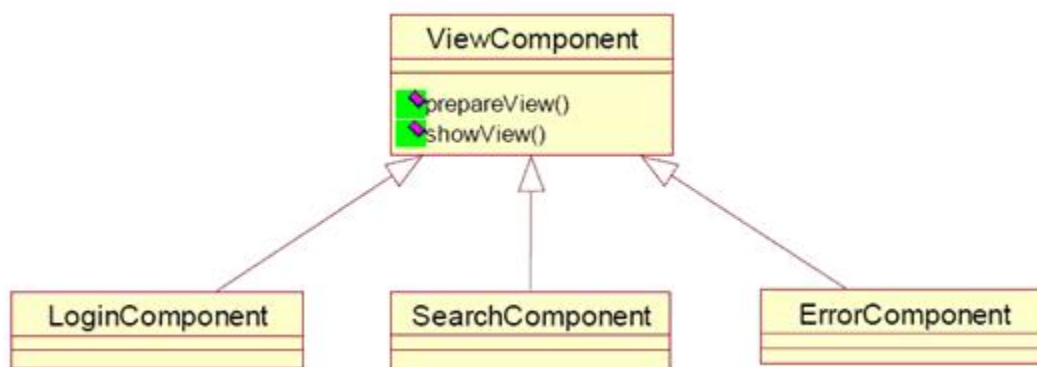
```
{.
```

```
else{.
```

```
}
```

[]

MVC



```
public class LoginComponent extends ViewComponent implements CommandListener {
```

```
public Display display;
```

```
...
```

```
// View related functions
```

```
public Displayable getView( ... );
```

```
public Displayable prepareView () { ... }
```

```
public void showView() { ... }
```

J2ME MVC

```
// Model related functions
```

```
Public boolean loginService(String name, String password){
```

```
...
```

```
}
```

```
// Controller
```

```
public void commandAction(Command c, Displayable s){
```

```
...
```

J2ME MVC

}

}

[]

Model-View

Model-View J2ME[awv3]



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// View example, use form as super class of a view

```
class UnitView extends Form implements CommandListener{
```

```
private LoginEngine engine;
```

```
private String result [awv4]
```

```
...
```

```
UnitView(String name; LoginEngine engine){
```

```
    Super(name);
```

```
    this.engine = engine;
```

```
}
```

```
String login(String name, String password){
```

```
    result=model.getService(name, password);
```

```
    ...
```

J2ME MVC

}

...

}

//Model example

class LoginEngine{

public String getService(String name,String password){

...

return result;

J2ME MVC

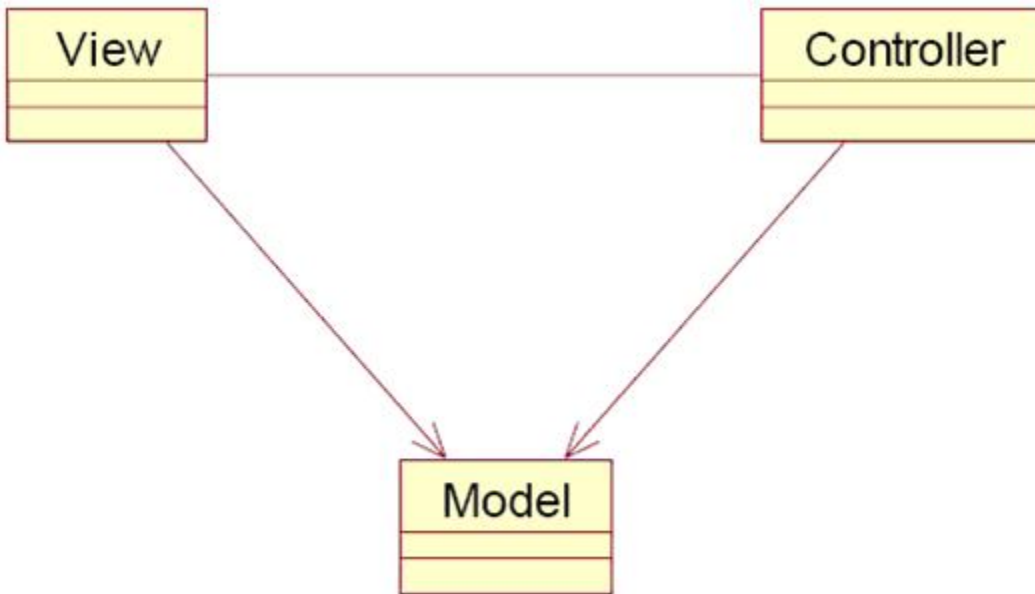
}

}

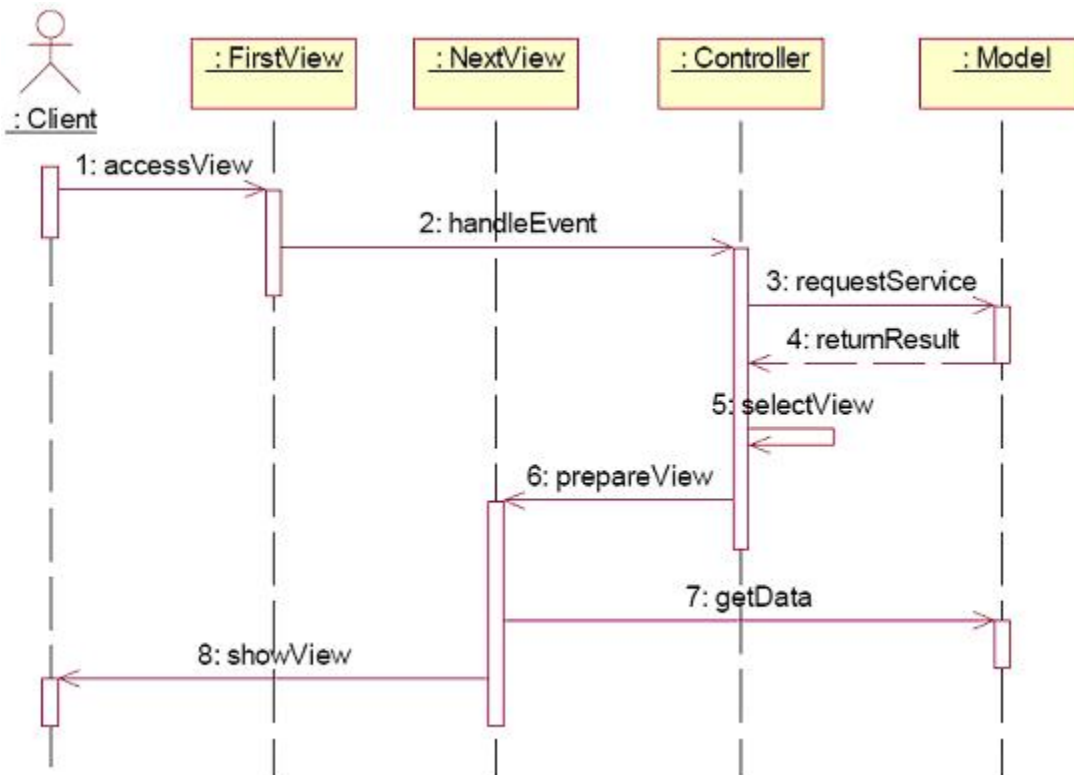
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MVC

Sun J2ME[awv5] --Smart Ticket



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```
// login view
```

```
public class LoginView extends Form implements CommandListener{
```

```
    Controller uniController;
```

```
    Display display;
```

```
    MVCMidlet mvcMidlet;
```

```
    TextField userNameField;
```

```
    TextField passWordField;
```

J2ME MVC

Command loginCommand;

public LoginView(String title){

super(title);

uniController=Controller.getInstance();

...

this.append(userNameField);

this.append(passWordField);

J2ME MVC

```
this.addCommand(loginCommand);
```

```
}
```

```
public void prepareView(Display display){
```

```
setCommandListener(this);
```

```
this.display=display;
```

```
}
```

```
public void showView(){
```

```
display.setCurrent(this);
```

```
}
```

```
public void commandAction(Command c, Displayable d){
```

```
if(c==loginCommand){
```

```
Event event = new Event();
```

```
event.setByName("userName",userNameField.getString());
```

```
event.setByName("password",passWordField.getString());
```

```
uniController.handleEvent(Event.LOGIN_EVENT,event);
```

J2ME MVC

}

...

}

}

//Controller

public class Controller {

private static Controller instance;

J2ME MVC

```
private Display display;
```

```
private LoginEngine loginEngine;
```

```
private HomeView homeView;
```

```
private LoginView loginView;
```

```
private ErrorView errorView;
```

```
...
```

```
private Controller() {
```

```
...
```

J2ME MVC

```
}
```

```
public void init(MIDlet midlet){
```

```
    this.display = Display.getDisplay(midlet);
```

```
    ...
```

```
}
```

```
public static synchronized Controller getInstance(){
```

```
    if(instance == null){
```

J2ME MVC

```
instance = new Controller();
```

```
}
```

```
return instance;
```

```
}
```

```
public void handleEvent(int eventID, Event e){
```

```
switch(eventID){
```

```
case LOGIN_EVENT:
```

J2ME MVC

```
String passWord = e.getByName("password");
```

```
String userName = e.getByName("userName");
```

```
Boolean result = loginEngine.loginService(userName,password);
```

```
if(result==true){
```

```
homeView.prepareView(display);
```

```
homeView.showView();
```

```
}
```

```
else{
```

```
errorView.prepareView(display,"loginError");
```

```
errorView.showView();
```

```
}
```

```
break;
```

```
...
```

```
}
```

```
}
```

J2ME MVC

}

//login model

public class LoginEngine {

public boolean loginService(String userName, String passWord){

boolean result = ...

...

return result;

J2ME MVC

}

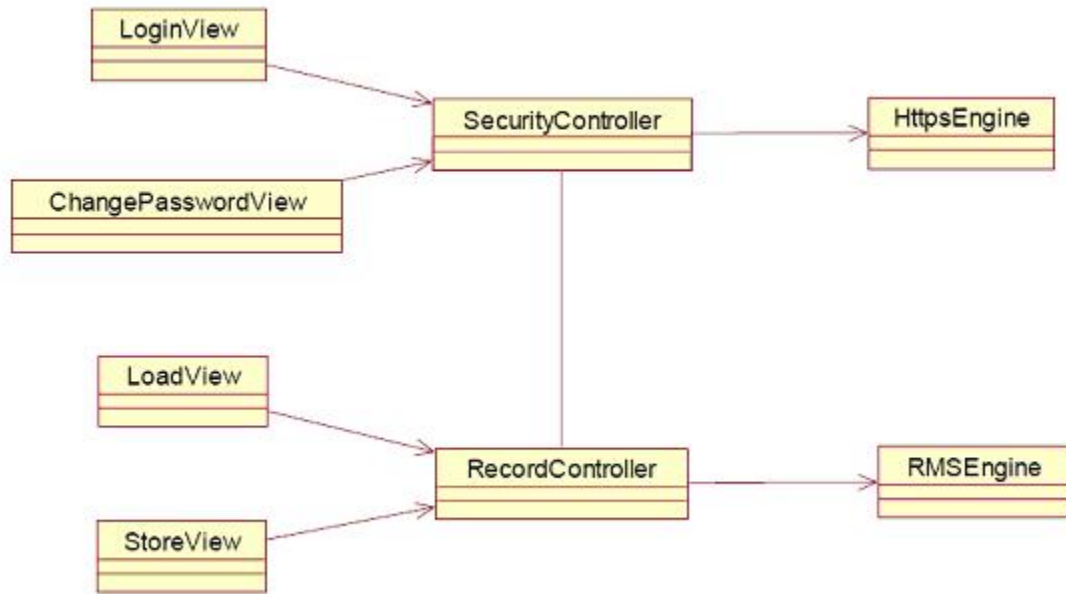
}

MVC model view controller

MVC

J2ME[awv6]

J2ME MVC



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J2ME MVC

MVC J2ME[awv7] J2ME[awv8]