StatePatternDemo

+ main: void

asks

<<Interface>>
State

+ doAction(): void

uses

Context

-state:State

+ Context(): void
+getstate(): void
+setState():void

implements

implements

implements

WaitingState

+ doAction(): void

VerificationState

+ doAction(): void

LoginState

+ doAction(): void

Group -2

Amey Uplenchwar 8067

Anshul Bhawsar   8093

Omkar Gurav 8048

Shrirang Bhalerao 8068

State.java

```java
public interface State {
    public void doAction(Context context );
}
```

Context.java

```java
public class Context {
    private State state;
    public Context(){
        state=null;
    }
    public void setState(State state){
        this.state=state;
    }
    public State getState(){
        return state;
    }
}
```

WaitingState.java

```java
public class WaitingState implements State {
    public void doAction(Context context){
        System.out.println("User is in Waiting State");
        System.out.println("Username and Password are inputed");
        context.setState(this);
    }
    public String toString(){
        return "Waiting State";
```

```
        }
    }
```

VerificationState.java

```java
public class VerificationState implements State  {
    public void doAction(Context context){
        System.out.println("User is in Verification State");
        System.out.println("Username and Password are being verified");
        context.setState(this);
    }
    public String toString(){
        return "Verification State";
    }
}
```

LoginState.java

```java
public class LoginState implements State{
    public void doAction(Context context){
        System.out.println("Login Successful");
        System.out.println("User can Search Flights Book them and Make Payment");
        context.setState(this);
    }
    public String toString(){
        return "Login State";
```

```
    }
}
```

StatePatternDemo.java

```java
public class StatePatternDemo {
    public static void main(String args[]){
        Context context=new Context();

        WaitingState w=new WaitingState();
        w.doAction(context);
        System.out.println(context.getState().toString());


        VerificationState v=new VerificationState();
        v.doAction(context);
        System.out.println(context.getState().toString());


        LoginState l=new LoginState();
        l.doAction(context);
        System.out.println(context.getState().toString());

    }
}
```

OUTPUT

User is in Waiting State

Username and Password are inputed

Waiting State

User is in Verification State

Username and Password are being verified

Verification State

Login Successful

User can Search Flights Book them and Make Payment

Login State