



JDI COMPOSITE ELEMENTS

31 JAN 2018

- **UI Objects. JDI**
- **JDI. Composite elements**
- **JDI Settings**
- **JDI for any UI**

- **All Composite elements**
- **Site Structure**
- **UI Objects**



COMPOSITE ELEMENTS

PAGE STRUCTURE



← → ↻ https://www.epam.com/careers ☆



SOLUTIONS

INDUSTRIES

ABOUT

IDEAS

CAREERS

CONTACT



Home > Careers

FIND YOUR DREAM JOB

Keywords (optional):

Saint-Petersburg

SEARCH →

Filter by: All Teams & Roles

THE 5 HOTTEST JOB VACANCIES AROUND EPAM

Senior ATG Developer 🔥

Software Engineering

San Francisco, CA, USA

Apply »

Front-End Engineer 🔥

Software Engineering

Mountain View, CA, USA

Apply »

Senior JavaScript Developer 🔥

Software Engineering

USA

Apply »

ContactPage (**Page**)

— ContactForm (**Form**)

— Name(TextField)

— Location (Dropdown)

— Message (TextArea)

— SubmitButton(Button)

→ ~~Save as Draft~~

→ ~~Submit~~

— Description (Text)

— Header (**Section**)

EpamSite (Site)

HomePage(Page)

SearchSection (Search)

SearchField(TextField)

SearchButton(Button)

Invitation(Text)

ContactPage(Page)

ContactForm(Form)

...

Description(Text)

```
@BeforeSuite(alwaysRun = true)
public static void setUp() {
    WebSite.init(EpamSite.class);
}
```

public class Header extends **Section**

public class LoginForm extends **Form**

public class SearchBar extends **Search**

public class Alert extends **Popup**

public class Navigation extends **Pagination**

@JSite("http://epam.com/")



domain=https://www.epam.com/

public class EpamSite extends **WebSite**

@JPage(url = "/index.html", title = "Good site")

public class HomePage extends **WebPage**


```
@JSite(domain = "http://epam.com/")
public class EpamSite extends Website {
    @JPage(url = "/index.html")
    public static HomePage homepage;
    @JPage(url = "/login", title = "Login page")
    public static LoginPage loginPage;
    @FindBy (css=".nav")
    public static Menu navigation;
}

@BeforeSuite(alwaysRun = true)
public static void setUp() {
    Website.init(EpamSite.class);
}
```

```
public class Header extends Section {  
    @FindBy (css=".submit")  
    public Button submit;  
    @FindBy (css=".followMe")  
    public Link followMe;  
    @FindBy (css=".navigation")  
    public Menu navigation;  
  
    public void openAbout() {  
        followMe.click();  
        navigation.select(ABOUT);  
    }  
}
```

USAGE

```
header.submit.click();  
header.menu.isSelected();  
header.openAbout();
```

```
@JSite(domain = "http://epam.com/")  
public class EpamSite extends Website {  
    @FindBy(id = "header")  
    public static Header header;  
    ...  
}
```

```
public class Header extends Section {  
    @FindBy (css=".submit")  
    public Button submit;  
    @FindBy (css=".followMe")  
    public Link followMe;  
    @FindBy (css=".navigation")  
    public Menu navigation;  
}
```

USAGE

```
header.submit.Click();
```



```
driver  
.findElement(By.id("header"))  
.findElement(By.css(".submit"))  
.click()
```

```
@JPage(url = "/main", title = "Good site", urlTemplate = "/main?\d{10}",  
urlCheckType = MATCH, titleCheckType = CONTAINS)  
public class HomePage extends WebPage
```

USAGE

```
homepage.open();  
homepage.checkOpened();  
homepage.isOpened();
```

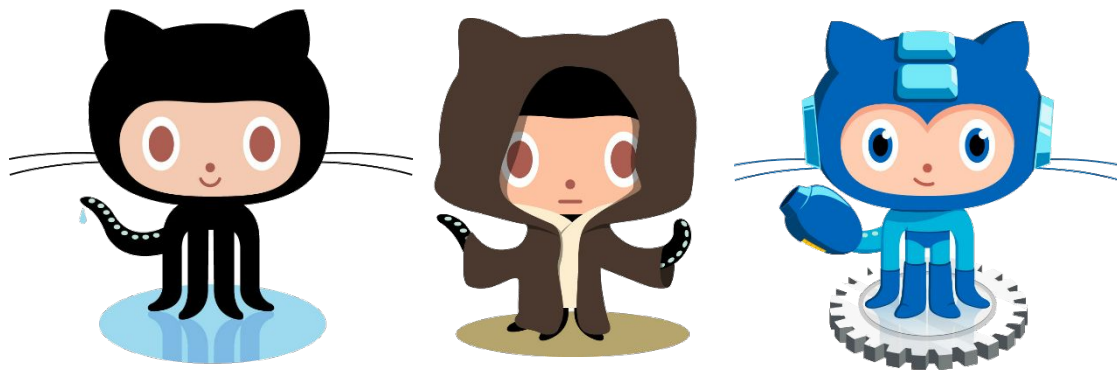
```
homepage.refresh();  
homepage.back();  
homepage.forward();  
homepage.addCookie();
```



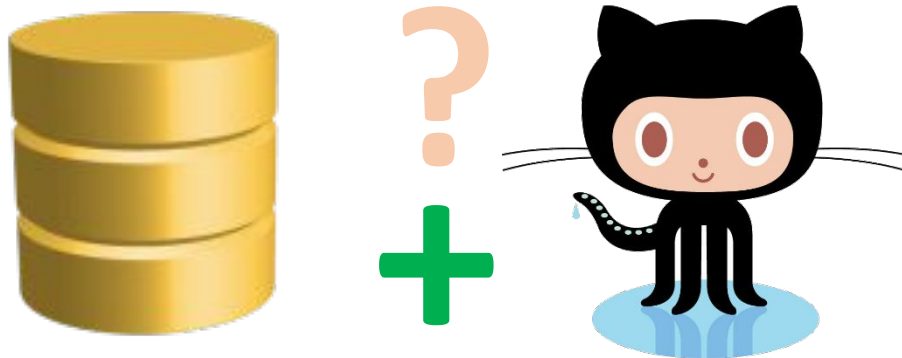


ENTITY DRIVEN TESTING

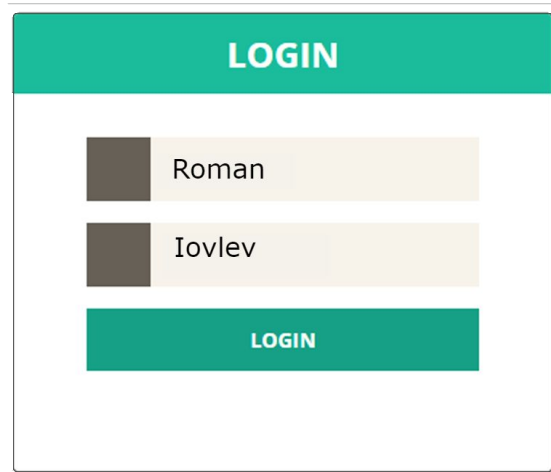
- Provide List<*User*> for test



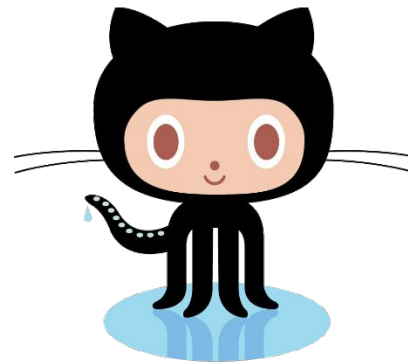
- Provide List<*User*> for test
- 0. Have *DefaultUser* in DB



- Provide List<*User*> for test
- 0. Have *DefaultUser* in DB
- 1. Login with *DefaultUser*



A login form with a green header labeled "LOGIN". It contains two input fields with the text "Roman" and "Iovlev" respectively. Below the fields is a green button labeled "LOGIN".



- Provide List<*User*> for test
- 0. Have *DefaultUser* in DB
- 1. Login with *DefaultUser*
- 2. Submit Contact Us Form for *DefaultUser*

CONTACT DETAILS	
Roman	lovlev
roman_iovlev@epam.com	89212345678
Epam	Academic/Student
Russian Federation	



- Provide List<*User*> for test
- 0. Have *DefaultUser* in DB
- 1. Login with *DefaultUser*
- 2. Submit Contact Us Form for *DefaultUser*
- 3. Get *Act. Opening* from Vacancy table

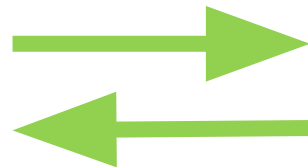
We found 26 job openings for you SORT BY:

3D Artist	User Experience & Design	St-Petersburg, Russia	Apply »
Business Analyst (Mining Industry)	Consulting & Business Analysis	St-Petersburg, Russia	Apply »
Business Analyst/Consultant (OpenLink Endur)	Consulting & Business Analysis	St-Petersburg, Russia	Apply »
Front-end Developer (JavaScript Developer)	Software Engineering	St-Petersburg, Russia	Apply »
Infrastructure Automation Architect (Linux + ...)	Software Architecture	St-Petersburg, Russia	Apply »
Software Engineering	Software Engineering	St-Petersburg, Russia	Apply »



- Provide List<*User*> for test
- 0. Have *DefaultUser* in DB
- 1. Login with *DefaultUser*
- 2. Submit Contact Us Form for *DefaultUser*
- 3. Get *Act. Opening* from Vacancy table
- 4. Assert *Act. Opening* equals to *Exp. Opening*

Actual



Expected



```
public class LoginForm extends Form<User> {  
    @FindBy (css=".login")  
    public TextField login;  
    @FindBy (css=".psw")  
    public TextField password;  
  
    @FindBy (css=".submit")  
    public Button submit;  
    @FindBy (css=".cancel")  
    public Button cancel;  
}  
  
public class User {  
    public String login = "roman";  
    public String password = null;  
}  
  
@Test  
public class simpleTest(User user) {  
    LoginForm.login(user);  
    ...  
}
```

@Test

```
public void formTest(User admin) {  
    loginForm.loginAs(admin);  
    filter.select(admin.name);  
    Assert.each(results).contains(admin.name);  
    admin.update(results.get(1));  
    payForm.submit(admin.creditCard);  
    Assert.areEquals(DB.transactions.get(1),  
        admin.creditCard);  
}
```

USAGE

```
loginForm.fill(user);  
loginForm.submit(user);  
loginForm.verify(user);  
loginForm.check(user);  
  
loginForm.cancel(user);  
loginForm.save(user);  
loginForm.publish(user);  
loginForm.search(user);  
loginForm.update(user);  
...
```




```
public class SearchBar extends Search { }
```

```
public class Navigation extends Pagination { }
```

```
public class Confirmation extends Popup { }
```

```
...
```

```
public class ContactConfirm extends Confirmation { }
```

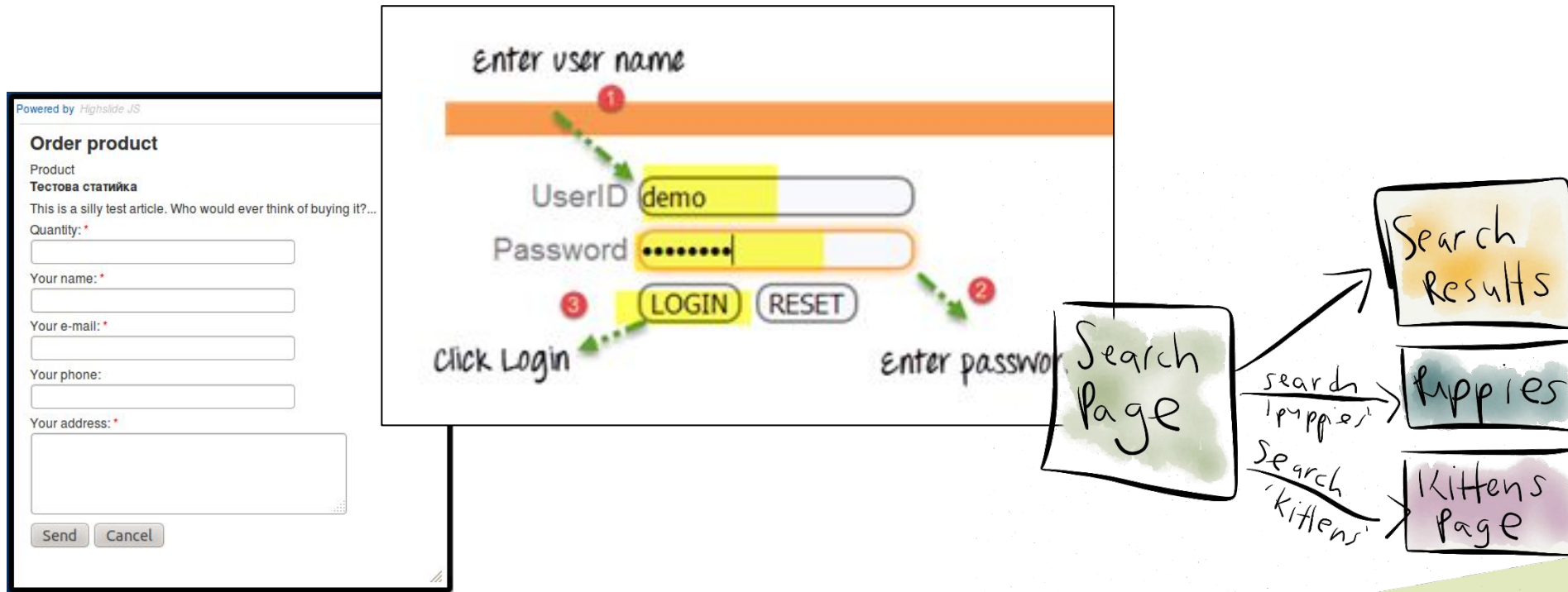
```
// implements IComposite
```



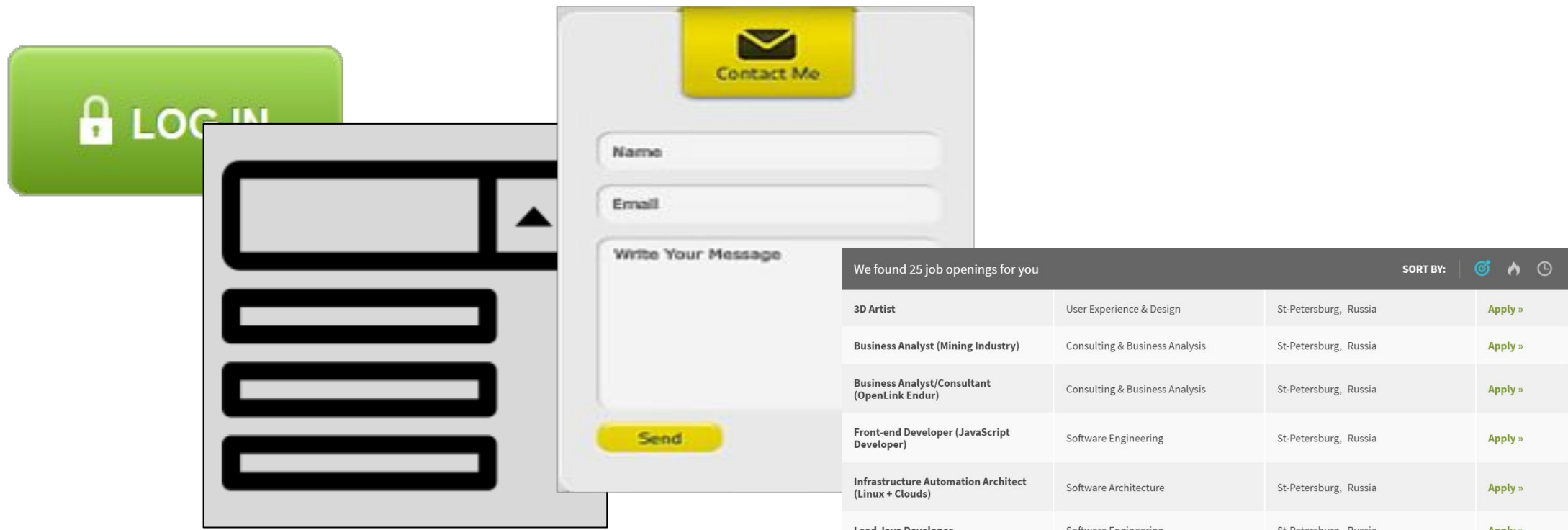
UI OBJECTS PATTERN



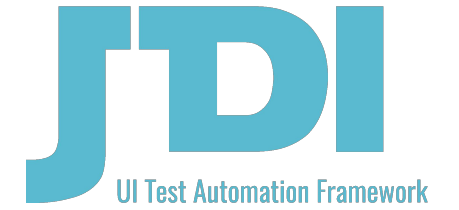
Page Objects



UI Elements



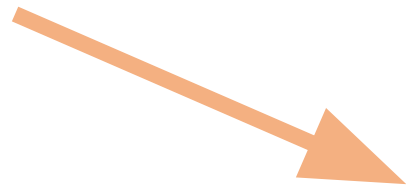
device implementation



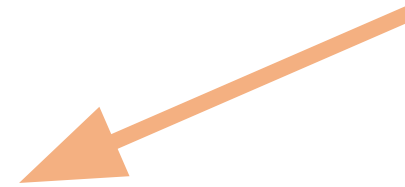
Interfaces



Page Objects



UI Elements



UI OBJECTS



Interfaces

- UI Objects. JDI
- JDI. Composite elements
- **JDI Settings**
- **JDI for any UI**



roman.lovlev



roman_iovlev@epam.com



troektor1988osu



dmitry_lebedev1@epam.com



prox318is



danila_morokov@epam.com



atlasova_julia



yulia_atlasova@epam.com