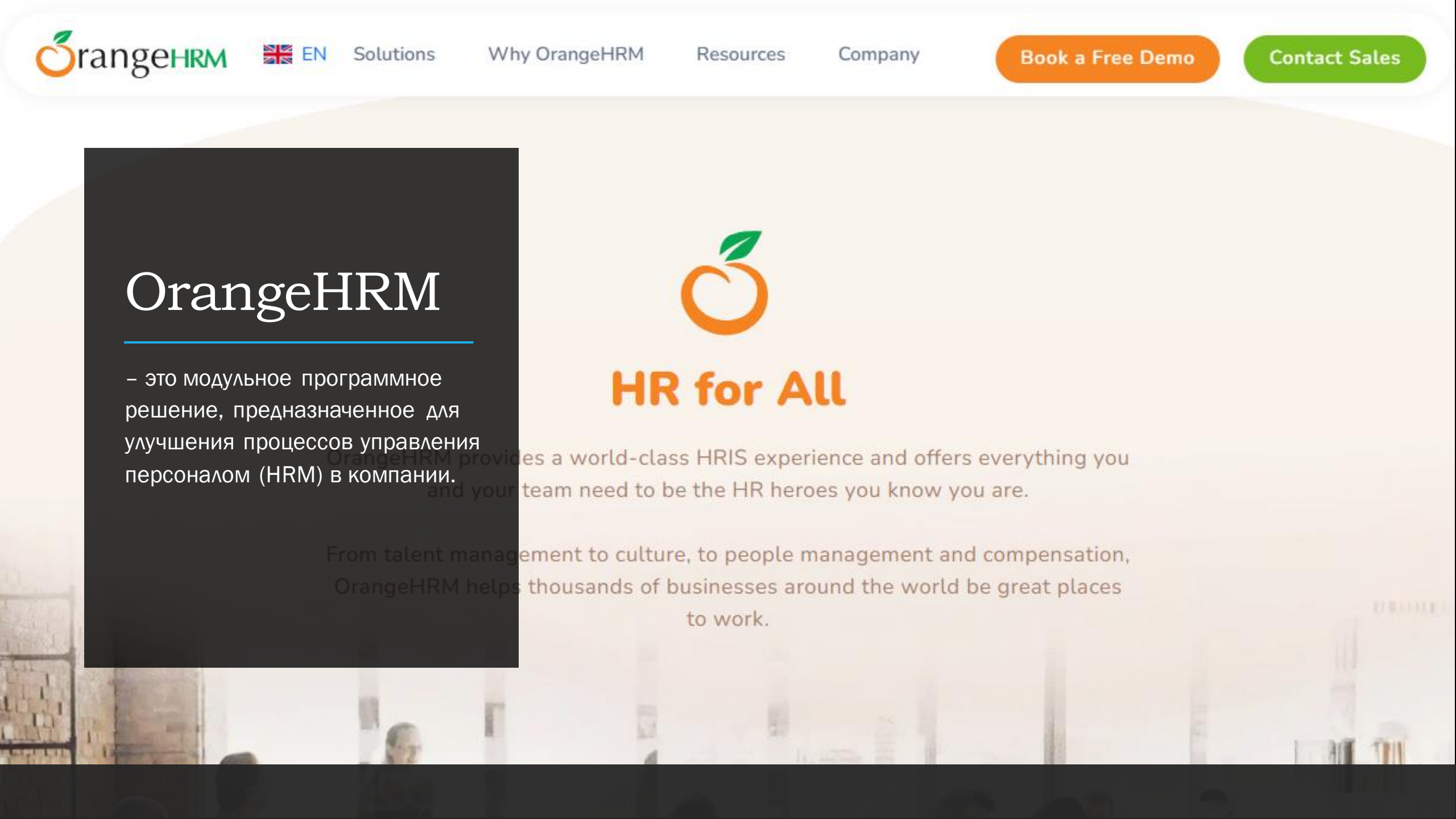
Денисова Анна

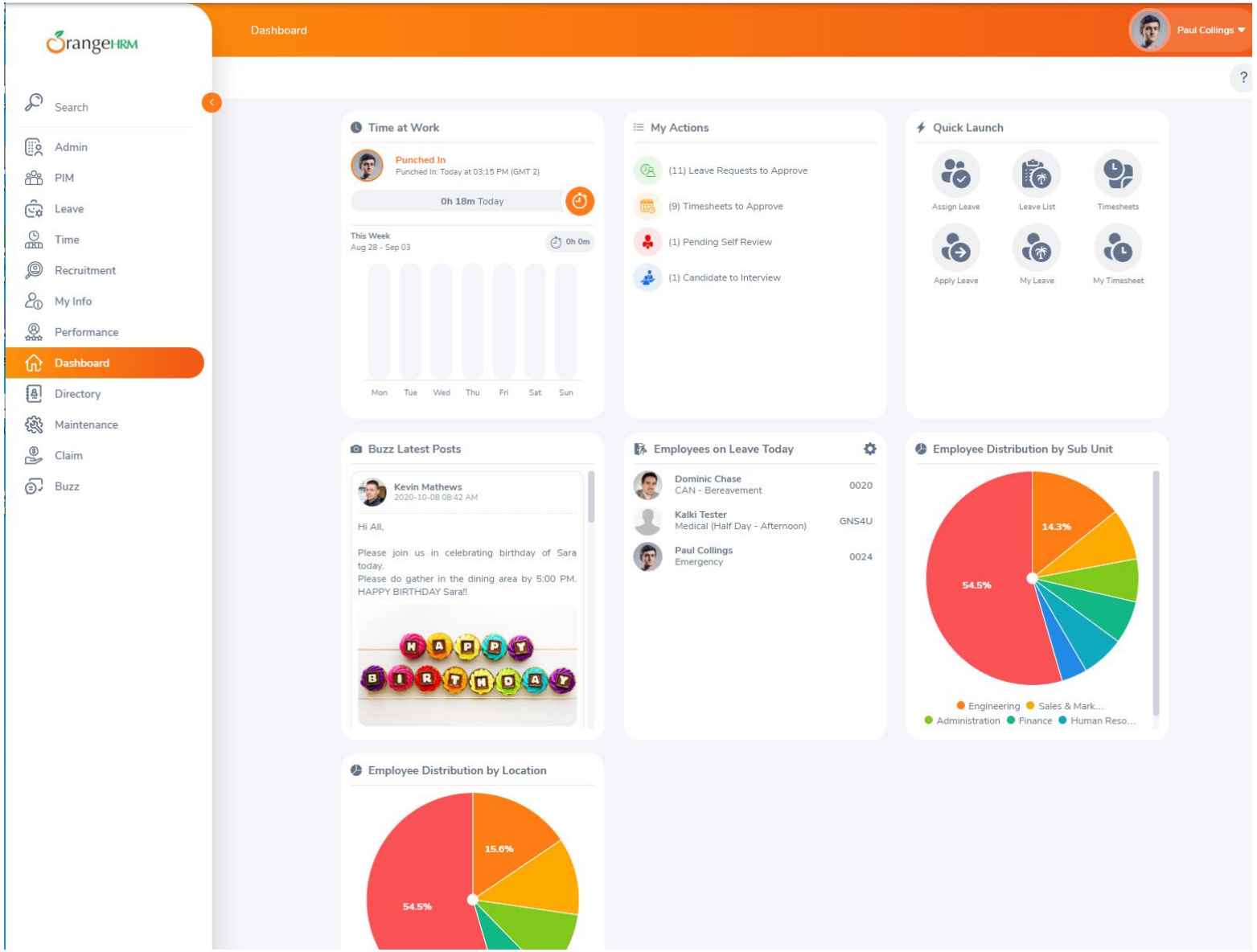
АВТОМАТИЗИРОВАННОЕ ТЕСТИРОВАНИЕ НА C#

QAC03-ONL



OrangeHRM

– это модульное программное решение, предназначенное для улучшения процессов управления персоналом (HRM) в компании.



opensource-demo

Технологии

- **Selenium WebDriver**
- **Nunit**
- **Nlog**
- **Allure**
- **CI/CD Azure**
- **PageObject**
- **PageStep**

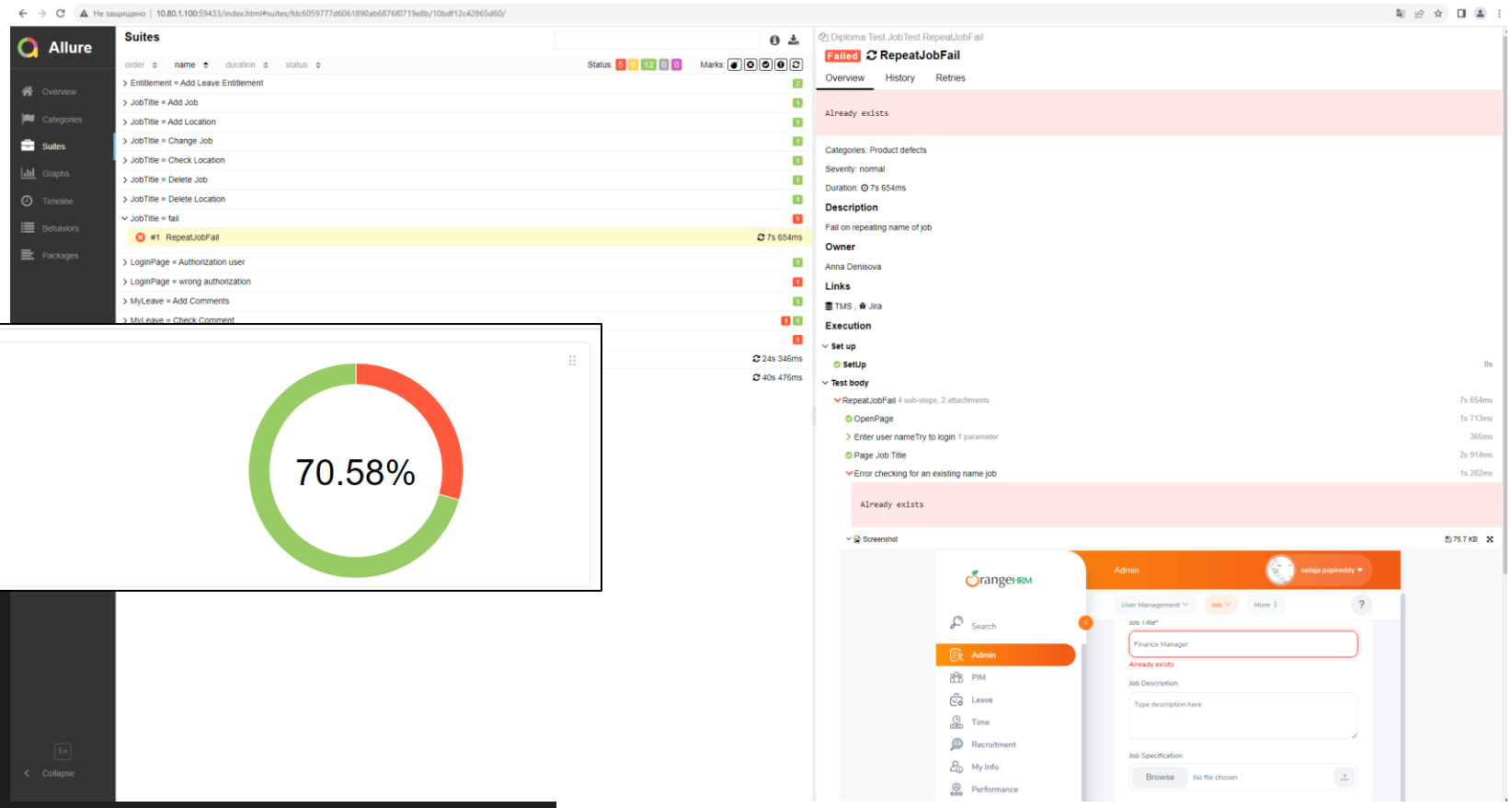
Pipeline

anechkadenisova.Diploma

master | anechkadenisova/Diploma / **azure-pipelines.yml**

```yaml
# Universal Windows Platform
# Build a Universal Windows Platform project using Visual Studio.
# Add steps that test and distribute an app, save build artifacts, and more:
# https://aka.ms/yaml

trigger:
- develop

pool:
  name: 'Default'

steps:
Settings
- task: NuGetCommand@2
  displayName: 'Restore nuget package for solution'
  inputs:
    command: 'restore'
    restoreSolution: '$(solution)'
    feedsToUse: 'select'


Settings
- task: DotNetCoreCLI@2
  displayName: 'Build solution'
  inputs:
    command: 'build'
    arguments: '--configuration Debug'

Settings
- task: DotNetCoreCLI@2
  displayName: 'Dotnet test -s BrowserSetup.runsettings'
  inputs:
    command: 'test'
    arguments: '-s C:\Users\nickd\source\repos\Diploma\Diploma\RunSettings\BrowserSetUp.runsettings'

```

Allure



```
namespace Diploma.Core
{
    [TestFixture]
    [AllureNUnit]
    Ссылок: 5
    public class BaseTest
    {
        private AllureLifecycle allure;

        [SetUp]
        Ссылок: 0
        public void SetUp()
        {
            allure = AllureLifecycle.Instance;
        }

        [TearDown]
        Ссылок: 0
        public void TearDown()
        {
            if(TestContext.CurrentContext.Result.Outcome.Status == NUnit.Framework.Interfaces.TestStatus.Failed)
                {
                Screenshot screenshot = ((ITakesScreenshot)Browser.Instance.Driver).GetScreenshot();
                byte[] bytes = screenshot.AsByteArray;
                allure.AddAttachment("Screenshot", "image/png", bytes);
                }

            Browser.Instance.Driver.Quit();
            Browser.Instance.CloseBrowser();
        }
    }
}
```

Execution

> **Set up**

Test body

AddJob 4 sub-steps, 1 attachment 8s 579ms

OpenPage 2s 145ms

Enter user nameTry to login 1 parameter 479ms

UserModel	Diploma.User.UserModel

Page Job Title 3s 130ms

Add new job 1s 232ms

Console Output 286 B

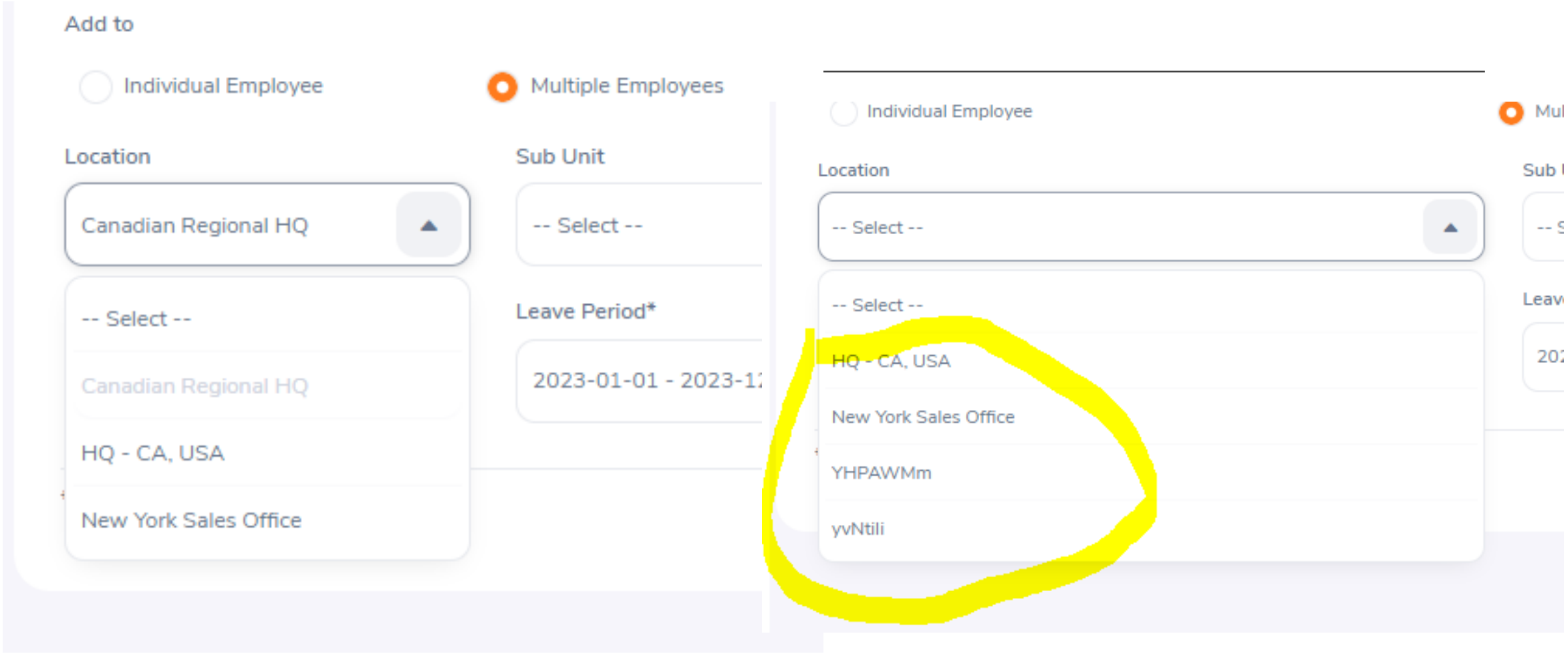
```
2023-08-30 11:10:27.7318 Info Navigate to url https://opensource-
demo.orangehrmlive.com/web/index.php/auth/login
2023-08-30 11:10:29.8764 Info Try to login like user Diploma.User.UserModel
2023-08-30 11:10:30.3558 Info Navigate to Job Page
2023-08-30 11:10:33.4855 Info Add new Job
```

```
AddJob
```

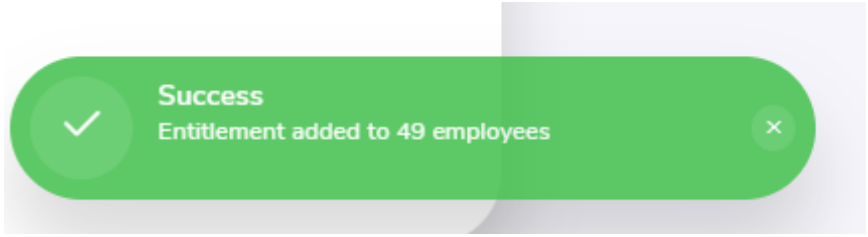
Logger

Трудности

Часто менялись локаторы, удалялись нужные записи



Быстро исчезающие уведомления




```
<p class="oxd-text oxd-text--p oxd-text--toast-title oxd-toast-content-text"
data-v-7b563373 data-v-35c8fe09>…</p>
<p class="oxd-text oxd-text--p oxd-text--toast-message oxd-toast-content-tex
t" data-v-7b563373 data-v-35c8fe09> == $0

</div>
```

Пример теста

```
Ссылок: 3 | 3/3 пройдены
public void LocationTitle()
{
    logger.Info("Navigate to Job Page");
    driver.FindElement(AdminPage).Click();
    driver.FindElement(OrganizationTitle).Click();
    driver.FindElement(LocationTitlesPage).Click();
}

[AllureStep("Add new location")]
Ссылок: 1 | 1/1 пройдены
public void AddNewLocation()
{
    var name = RandomHelper.GenerateRandomString(7);
    var code = RandomHelper.GenerateRandomNumericString(6);

    logger.Info("Add new Location");
    driver.FindElement(AddButton).Click();
    driver.FindElement(NameLocation).SendKeys(name);
    driver.FindElement(City).SendKeys(name);
    driver.FindElement(ZipCode).SendKeys(code);

    IWebElement locationDropdown = driver.FindElement(LocationDropdown);
    locationDropdown.Click();
    IWebElement locationText = driver.FindElement(LocationText);
    locationText.Click();

    driver.FindElement(SaveLocation).Click();
}
```

Admin / Organization

User Management | Job | Organization | Qualifications | Nationalities | Corporate Branding | Configuration

Locations

Name | City

+ Add

(5) Records Found

Name	City	Country	Phone	Number of Employees	Actions
Canadian Regional HQ	Ottawa	Canada	1-876-267-6999	9	
HQ - CA, USA	California	United States	1-888-452-1508	7	
LQERKBW		Brazil	902100	0	
New York Sales Office	New York	United States	1 (866) 781-7104	12	
Texas R&D	Texas	United States	1 (866) 791-7204	8	

```
[AllureStep("Change new job")]
Ссылок: 1 | 1/1 пройдены
public void ChangeNewJob()
{
    logger.Info("Change new Job: Download File");

    IWebElement textElement = driver.FindElement(FieldAdmin);
    IWebElement editElement = textElement.FindElement(EditIcon);
    editElement.Click();
    IWebElement fileInput = driver.FindElement(DownloadFile);

    var path = Environment.CurrentDirectory;
    var fileFullPath = path + FileHelper.GetFilesForUploadDir();

    fileInput.SendKeys(fileFullPath);
    driver.FindElement(SaveJob).Click();
}
```

```
namespace Diploma.Helpers
{
    Ссылок: 1
    public class FileHelper
    {
        Ссылок: 1
        public static string GetFilesForUploadDir()
        {
            var filePath = "\\TestData\\AddDev.txt";

            return filePath;
        }
    }
}
```

FileHelper