Custom Argument Matchers

Understanding Argument Matchers

Standard Argument Matchers - Example

```
when(myMock.someMethod(anyInt())).thenReturn("Number");
when(myMock.someMethod(eq(42))).thenReturn("The Answer");
```

Why Use Custom Argument Matchers?

Custom Matchers: Clarity and Precision

```java
// Standard approach using built-in matchers
when(transactionProcessor.process(any(Transaction.class))).thenReturn(true);

// Custom matcher for clarity and precision
when(transactionProcessor.process(argThat(new IsBusinessDayMatcher()))).thenReturn(true);
```

Creating Custom Argument Matchers

The argThat Matcher

```
verify(mockedUserService).createUser(argThat(new ValidEmailUserMatcher()));
```

Implementing matches

```java
// implementation of custom matcher
public class ValidEmailUserMatcher implements ArgumentMatcher<User> {
    @Override
    public boolean matches(User user) {
        return user.getEmail().matches("^[A-Za-z0-9+_.-]+@(.+)$");
    }
}




// usage of ValidEmailUserMatcher
verify(mockedUserService).createUser(argThat(new ValidEmailUserMatcher()));
```