

# Processing Input Data

---



**Michael Hoffman**

DEVELOPER AND PLURALSIGHT AUTHOR

@mhi\_inc [github.com/michaelhoffmantech](https://github.com/michaelhoffmantech)



# Item Processor

**Apply business rules repeatedly**

**Transform input data**

**Validation**



# PatientEntity Class

```
@Entity
@Table(name = "patient")
public class PatientEntity implements Serializable {

    @Id
    @GeneratedValue(strategy = GenerationType.SEQUENCE,
        generator = "sequenceGenerator")
    @SequenceGenerator(name = "sequenceGenerator")
    @Column(name = "patient_id")
    private Long id;

    @NotNull
    @Column(name = "source_id", nullable = false)
    private String sourceId;

    ...

}
```



# Demo



**Demo 15 – Creating the entity type for transformation**



```
@Bean
@StepScope
public Function<PatientRecord, PatientEntity> processor() {
    return (patientRecord) -> {
        return new PatientEntity(
            patientRecord.getSourceId(),
            patientRecord.getFirstName(),

            ...

            LocalDate.parse(patientRecord.getBirthDate(),
                DateTimeFormatter.ofPattern("M/dd/yyyy"))
        );
    };
}
```

## BatchJobConfiguration.java

**Package** com.pluralsight.springbatch.patientbatchloader.config



# Demo



## Demo 16 – Implementing the item processor



```
@Test
public void testProcessor() throws Exception {

    PatientRecord patientRecord = new PatientRecord( ... );
    PatientEntity entity = processor.apply(patientRecord);
    assertNotNull(entity);
    assertEquals("72739d22-3c12-539b-b3c2-13d9d4224d40", entity.getSourceId());

    ...

}
```

## BatchJobConfigurationTest.java

**Class in the test folder under the package**

**com.pluralsight.springbatch.patientbatchloader.config**



# Demo



## Demo 17 - Testing the item processor





# Demo



**Demo 18 – Executing the job with the item processor**



# Summary



**Added a new entity type**

**Implemented an item processor**

**Tested the item processor**