

# Process Mining and Intelligence Project

## Emotion Based Music Selection

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## 1 Task-level modeling

### 1.1 Segregation system

#### 1.1.1 Check data balancing



Figure 1: "Check data balancing" mock-up form

Step	O	CL	S	SC
1 <b>ACTOR</b> opens "Check data balancing" form.				
2 <b>SYSTEM</b> shows the report.				
3 <b>SYSTEM</b> shows a hint whether the data is balanced or not.				
4 <b>ACTOR</b> checks threshold in the UI.				
5 <b>FOR</b> each column in the report:				
5.1 <b>IF</b> the column is not within the displayed threshold.				
5.1.1 <b>THEN</b> the data is not balanced.				
6.1 <b>IF</b> the data is balanced.				
6.1.1 <b>ACTOR</b> clicks "Balanced" button.				
6.2 <b>ELSE</b>				
6.2.1 <b>ACTOR</b> clicks "Unbalanced" button.				
7 <b>SYSTEM</b> shows a confirmation dialog.				
8 <b>ACTOR</b> closes the form.				
Human task cost				

Table 1: Detailed use case for "Check data balancing" task

### 1.1.2 Check input coverage

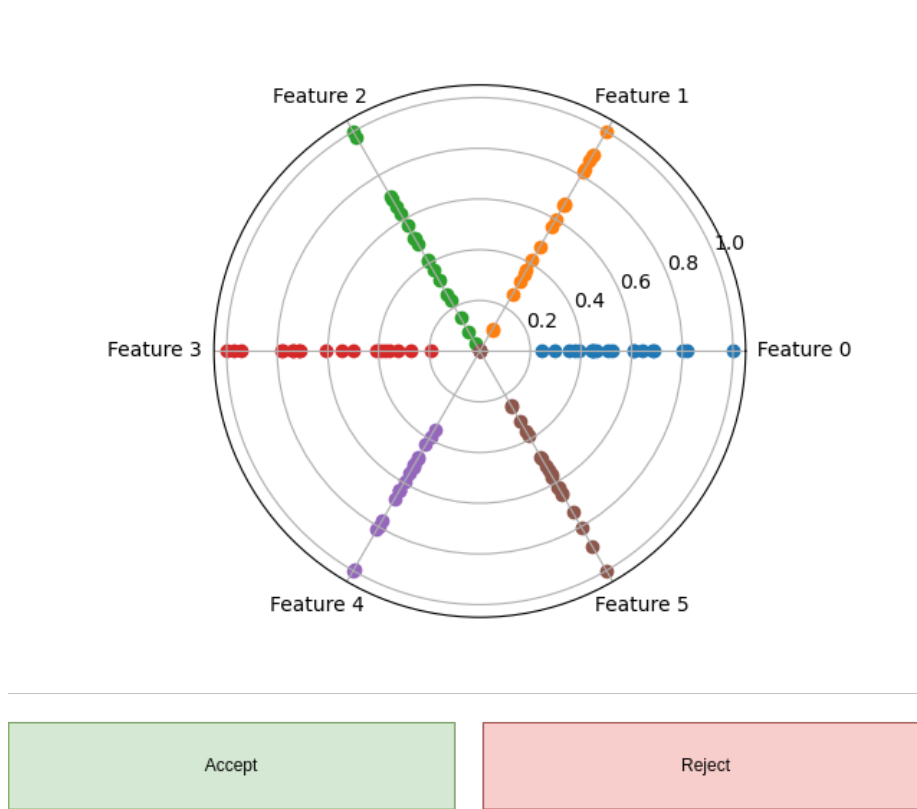


Figure 2: "Check input coverage" mock-up form

Step	Cost calculation	SC
<b>1 ACTOR</b> opens "Check input coverage" form.		
<b>2 SYSTEM</b> shows a radar scatter plot of the input distribution.		
<b>3 FOR</b> each radius in the radar scatter plot:		
<b>3.1 IF</b> the distribution is not uniform as expected.		
<b>3.1.1 THEN</b> the input coverage is not satisfied.		
<b>4.1 IF</b> the input coverage is satisfied.		
<b>4.1.1 ACTOR</b> clicks "Accept" button.		
<b>4.2 ELSE</b>		
<b>4.2.1 ACTOR</b> clicks "Reject" button.		
<b>5 SYSTEM</b> shows a confirmation dialog.		
<b>6 ACTOR</b> closes the form.		
Human task cost		

Table 2: Detailed use case for "Check input coverage" task