# 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

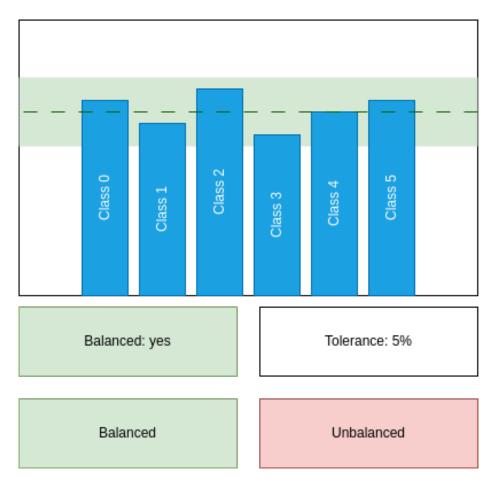


Figure 1: "Check data balancing" mock-up form

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

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

## 1.1.2 Check input coverage

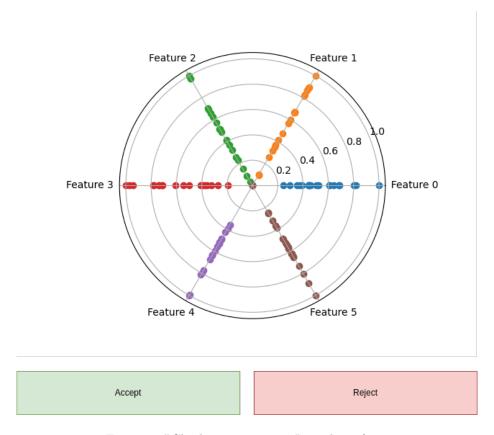


Figure 2: "Check input coverage" mock-up form

Step	Cost calculation	$\mathbf{SC}$
1 ACTOR 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.		
4.1 IF the input coverage is satisfied.		
4.1.1 ACTOR clicks "Accept" button.		
4.2 ELSE		
4.2.1 ACTOR clicks "Reject" button.		
<b>5 SYSTEM</b> shows a confirmation dialog.		
6 ACTOR closes the form.		

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