# 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

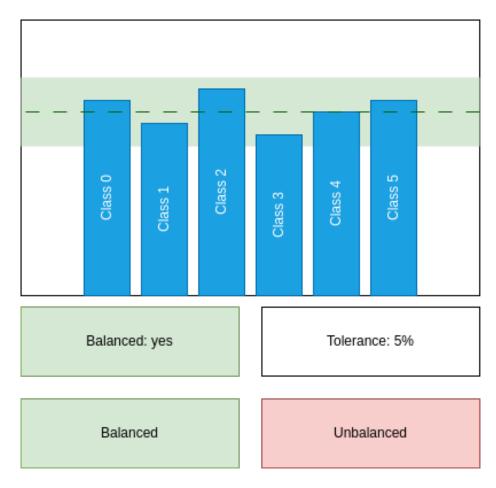


Figure 1: "Check data balancing" mock-up form

Step	О	$\mathbf{CL}$	$\mathbf{S}$	$\mathbf{SC}$
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.				
6.1.1 ACTOR clicks "Balanced" button.				
6.2 ELSE				
6.2.1 ACTOR clicks "Unbalanced" button.				
7 SYSTEM shows a confirmation dialog.				
8 ACTOR closes the form.				
Hu	ıman task cost			

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

## 1.1.2 Check input coverage

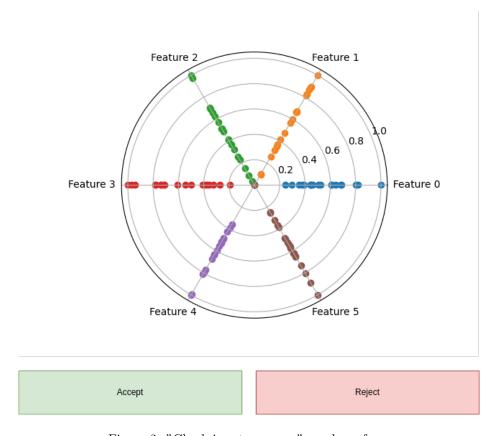


Figure 2: "Check input coverage" mock-up form

Step	Cost calculation	SC
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.		
	Human task cost	

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

# 1.2 Development system

#### 1.2.1 Set iteration number

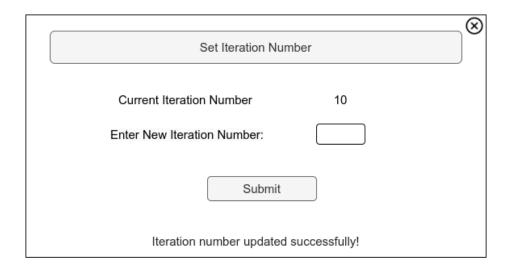


Figure 3: "Set iteration number" mock-up form

Step	Cost calculation	$\mathbf{SC}$
1 ACTOR opens "Set Iteration Number" form.		
2 SYSTEM displays the current iteration number.		
<b>3 ACTOR</b> inputs the desired number of iterations.		
4 ACTOR clicks "Submit" button to confirm the iteration number.		
<b>5 SYSTEM</b> shows a confirmation dialog.		
6 ACTOR closes the form.		
	Human task cost	

Table 3: Detailed use case for "Set iteration number" task