

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

Step	Cost calculation	SC
1 ACTOR opens "Check data balancing" form.		
2 SYSTEM shows the report.		
3 SYSTEM shows a hint whether the data is balanced or not.		
4 ACTOR checks threshold in the UI.		
5 FOR each column in the report:		
5.1 IF the column is not within the displayed threshold.		
5.1.1 THEN the data is not balanced.		
6.1 IF 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.		

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

1.1.2 Check input coverage

Step	Cost calculation	SC
1 ACTOR opens "Check input coverage" form.		
2 SYSTEM shows a radar scatter plot of the input distribution.		
3 FOR each radius in the radar scatter plot:		
3.1 IF the distribution is not uniform as expected.		
3.1.1 THEN 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.		
5 SYSTEM shows a confirmation dialog.		
6 ACTOR closes the form.		

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