This folder contains additional material for the paper submission to Information Sciences:

**“Towards Retrieval-based Conversational Recommendation”**

We have two main directories at the root level. The first named **‘CRB-CRS Code’** contains the complete Python source code for our own developed retrieval-based recommender system. The second directory, named ‘**Studies Data**’ includes the data and results for the user studies, exploratory analyses, and ANOVA test results reported in the manuscript.

Under the ‘**Studies Data**’ directory, we have four subdirectories named ‘**Study-1a**’, ‘**Study-1b**’, ‘**Study-1c**’, and ‘**Exploratory Analyses**’.

# Study-1a:

The description of the content in the ‘**Study-1a’** directory is as follows.

1. The file named ‘**Compiled Results.xlsx**’ contains our overall analysis and compiled results regarding the online study.
2. The file named ‘**Invalid Trials.xlsx**’ contains all the cases where the participants failed attention. Note that each user has 10 dialog situations in this particular file.
3. The file named ‘**Discarded Cases.xlsx**’ contains those cases which we considered inconsistent as reported in the manuscript. There are 8 cases, thereby, 72 (9x8) dialog situations in this file.
4. Then we have another file named ‘**Valid Trials.xlsx**’, which contains data of only valid cases. The valid cases fulfill the following criteria as reported in the manuscript.
   1. The attention check is passed
   2. The inconsistent cases found after manual inspection are discarded

In this file, each user has 9 dialog situations since the situation that belongs to the attention check is deleted for results analysis.

1. The file named ‘**Demographics Details.xlsx**’ contains the demographics details of participants. Please note that we reported demographics data for valid cases only.
2. The file named ‘**HSD Test.xlsx**’ contains the results for both the ANOVA test and Tukey’s HSD test.
3. The file named ‘**Online studies raw data.json’** contains raw data of our studies in the form of JSON.
4. Finally, the file named ‘**ReadMe for JSON data.docx**’ includes a description regarding how to read the JSON data for a particular participant.

# Study-1b:

The description of the content in the ‘**Study-1b’** directory is as follows.

1. The file named ‘**Compiled Results.xlsx**’ contains our overall analysis and compiled results regarding Study-1b.
2. The file named ‘**Binned Trials.xlsx**’ contains the normalized data based on unique dialog situations for valid cases only.

# Study-1c:

The description of the content in the ‘**Study-1c**’ directory is as follows.

1. The file named ‘**Unique Questions.xlsx**’ contains unique dialog situations that ended with a seeker’s particular question. Note that in this file, there are in total 34 unique trials.
2. The file named ‘**Total Trials.xlsx**’ contains all the dialog situations that ended with a seeker’s particular question. In this file, we have in total 96 trials.

# Exploratory Analyses:

Finally, the description of the content in the ‘**Exploratory Analyses**’ directory is as follows.

1. The file named ‘**Analysis-1.xlsx**’ contains all the trials in the first tab named ‘**Data**’, where the responses of three discussed systems scored meaningless. In the second tab of the same file, named ‘**Results**’, we provide the complied results of our analysis.
2. The file named ‘**Analysis-2.xlsx**’ consists of complied results regarding the different ways users provide their preferences to seek recommendations. In total we found 7 different ways users provide their preferences in the context of conversational recommendation.