FS02 Challenge Submission - System Description Document

This document serves as an example system description document, which is being used to provide details regarding the Submission Packet for the Fearless Steps Challenge Phase-02.

Contents of the Submission Packet:

- 1. System Description Document: A document describing the system should be included as a .pdf file in the base submission packet directory (same location as in the example submission packet provided). More details on the description provided in FS01 Eval Plan Appendix D. Participants can also send their Interspeech paper drafts as a System Description Document (this document will not be shared by the FS Team to anyone at any time). If participants are sending multiple submissions for the same task based on the system described in the paper, the same document can be used in multiple submission packets.
- 2. Dev and Eval: Participants are required to send their system output results on both the Dev and Eval sets for a given task. The Dev folder should only include system output results for a given challenge task on the Dev set provided for that task. The Eval folder should only include system output results for a given challenge task on the Eval set provided for that task. All system output files should have the same filename (with different extension) as its corresponding audio stream file for tasks using audio streams (SAD, SD_track_1, SD_track_2, and ASR_track_1). For tasks using audio segments (SID, ASR_track_2). For correct formatting examples, please refer to the ./egs/ directory of the FS02 Scoring Toolkit. Additionally, details regarding the system output files are also provided by running the shell scripts in ./scripts/ with no input arguments. The following number of files will be expected in both folders (per task):
 - a. **Speech Activity Detection (**SAD**)**: All the files should have the .txt extension and must follow the format provided in the FS01 Eval Plan Appendix A.3.
 - i. Dev: 30 files, titled *FS02_dev_001.txt ... to ... FS02_dev_030.txt*
 - ii. Eval: 40 files, titled FS02 eval 001.txt ... to ... FS02 eval 040.txt
 - b. **Speaker Diarization** (*SD_track1*, *SD_track2*): Both tracks will have the same submission format. All the files should have the .rttm extension and must follow the format provided in the above mentioned Eval Plan, Appendix A.1.
 - i. Dev: 30 files, titled FS02 dev 001.rttm ... to ... FS02 dev 030.rttm
 - ii. Eval: 40 files, titled FS02 eval 001.rttm ... to ... FS02 eval 040.rttm
 - c. **Speaker Identification** (*SID*): The 2 files should have the .txt extension and must follow the format provided in the FS01 Eval Plan Appendix A.4.
 - i. Dev: 1 file, titled FS02_SID_uttID2spkID_Dev.txt which contains 6373 SID utterance IDs with their 5 system predictions.
 - ii. Eval: 1 file, titled *FS02_SID_uttID2spkID_Eval.txt* which contains 8466 SID utterance IDs with their 5 system predictions.
 - d. **Automatic Speech Recognition Track-1** (*ASR_track1*): All the files should have the **.json** extension and must follow the format provided in the <u>FS01 Eval</u>

<u>Plan Appendix A.2</u>. All .json files must have the respective fields in every object/struct: "words", "startTime", and "endTime".

- i. Dev: 30 files, titled FS02_dev_001.json ... to ... FS02_dev_030.json
- . Eval: 40 files, titled FS02_eval_001.json ... to ... FS02_eval_040.json
- e. **Speaker Identification** (*SID*): The 2 files should have the NO file extension and must follow the format provided by Kaldi, describes in the "text" section of the Kaldi Data Prep page (https://kaldi-asr.org/doc/data_prep.html#data_prep_data).
 - i. Dev: 1 file, titled FS02_ASR_track2_transcriptions_Dev which contains 9203 utterance IDs with their corresponding transcriptions.
 - ii. Eval: 1 file, titled *FS02_ASR_track2_transcriptions_Eval* which contains 13714 utterance IDs with their corresponding transcriptions.

Additional details regarding the Evaluation and Submission Rules are provided to participants in a separate document. Please feel free to reach out to <u>FearlessSteps@utdallas.edu</u> for any queries or clarifications.