CARNEGIE MELLON UNIVERSITY AFRICA

Minutes of the CSSR4Africa Team Meeting

Date and Time: September 01, 2025
Venue: Room C210.
Status: Draft.

Participants
Assane Gueye
Birhanu Shimelis Girma
Clifford Onyonka
Ibrahim Jimoh
Muhammed Danso, Chairman
Muhirwa Richard
Tsegazeab Tefferi
Yohannes Haile

Muhamed Danso welcomed the participants to the meeting and the Committee members then discussed all the items of the meeting agenda. These discussions are summarized below.

1. Approval of the minutes of the last meeting
The participants reviewed the minutes of the previous meeting held on August 25, 2025 and approved them as a true and accurate record of the meeting.

2. Matters arising from the minutes
Agenda item 1: Update project milestones to show date for 'all software integration'.
Action: Done.
Agenda item 2: Privacy regarding third-party closed-source LLMs
Action: Removed since we are working with open-source LLM.
Agenda item 3: Update software installation manual with steps for installing individual ROS nodes.
Action: In progress.
Agenda item 4: Update software installation manual with Jetson and Real-sense camera installation and configuration steps.
Action: Done.
Agenda item 5: Remove the 'merge by pull request only' rule between the devel and main branch of the CSSR4Africa deliverable reports GitHub repository.
Action: Done.
Agenda item 6: Send an email to the robotics lab users, in regard to missing items in the lab.
Action: Done.

3. Progress reports.
Matters arising from the progress reports of August 29, 2025 discussed below in agenda 5, 6, 7,8, 9 and10.

4. Status of tasks, deliverables, and software.
Work is on-going to ensure that robot localization is integrated into GitHub by Wednesday 3rd September 2025.

5. Interactive demo.
The team discussed using an open-source LLM: In this approach, the interaction pipeline would consist of ASR (Automatic Speech Recognition), an LLM (Large Language Model), and TTS (Text-to-Speech). The specific LLM to be used is **SmolLM2**. This approach is more suitable for the CCSR4Africa use case, as it would be hosted locally. Additionally, the team would have greater flexibility to innovate due to increased control over the system.

6. ASR.
Clifford will demo four different ASR models in front of the team, and together they will select the one that is most accurate and fastest. A backup model will also be available in case one fails to work.

7. Text - to - speech
Team suggested that the audio voices to be used during static demo should be generated before and they will be played during the demo. Muhirwa will demo the XTTS model for English in front of the team, and the team will evaluate both the accuracy and the speed of voice generation.

8. Software Updates.
Everyone has privileges to edit the section they are working on but before making or pushing any changes they should request ownership from Danso.

9. Software installation manual.
The installation script should be updated to include the full installation of the behavior controller, as highlighted by Birhanu. Other team members should also update their installation manuals according to the sequence, with Muhirwa being the next person in the loop.

10. Localization
Ibrahim mentioned the issue of the robot moving in circles while navigating to the goal. This problem appeared after integrating absolute localization with navigation. The team suggested two options to address this:
 1. Have absolute localization reset itself internally after a certain period of time.
 2. Reset it after the robot reaches each specified goal.
Both options should be tested to determine the best approach. Alternatively, the system could use relative localization while the robot is moving and switch to absolute localization once the robot reaches its goal.

11. Any other business.
Due to some missing lab items, a meeting has been scheduled for 8th September. It will bring together everyone who regularly uses AI and robotics lab to ensure they are reminded of the lab's standards and rules.

12. Date and time of next meeting
The next meeting will be held on Monday September 08, 2025, in C210 at 10AM CAT.

End of the Meeting
There being no other business, the Chairman thanked the participants for their contributions and closed the meeting.

Action items following the meeting of the CSSR4Africa project

Action	Action description	Responsible	Completion date
1	Update the status of the milestones with their new due dates and Interactive Demo.	M. Danso	September 05, 2025
2	Update the installation Manual	Team	September 05, 2025
3	Demonstrate Four different ASR models to the team.	C.Onyonka	September 01, 2025
4	Demonstrate XTTS English version to the team.	R. Muhirwa	September 01, 2025
5	Generate audios for all text scripts used in static demo	R. Muhirwa	September 05, 2025
6	Update the installation script to include the behavior controller.	T. Tefferi	September 05, 2025
7	Implement parallel processing and execution with both Kinyarwanda and English.	T. Tefferi	September 05, 2025
8	Produce the audio voices before hand and play them during the demo	T. Tefferi and R. Muhirwa	September 05, 2025
9	Remove the current devel and create a new one.	H. Yohannes	September 05, 2025
10	Putting stickers on every lab item.	H. Yohannes	September 05, 2025
11	Send the email with specification about which demo to perform according to the time available between the arrival of the visitor and the team preparation.	T. Tefferi	September 05, 2025

Table 1: Action Items