CARNEGIE MELLON UNIVERSITY AFRICA

Minutes of the CSSR4Africa Team Meeting

Date and Time: 22nd April 2025, at 12:00 pm
Venue: Room No. D210.
Status: Draft.

Participants
Adedayo Akinade
Birhanu Shimelis Girma
Clifford Onyonka
Ibrahim Jimoh
Muhirwa Richard
Yohannes Haile
Eyerusalem Birhan
Muhammed Danso (Chairman)
Tsegazeab Tefferi

Apologies
David Vernon

The team members welcomed each other and noted that Prof David Vernon was unable to attend the meeting due to illness. Muhammed Danso was the chairman for this meeting, and Yohannes Haile was taking the minutes.

The Committee members discussed all the items on 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 14th April 2025 and approved them as a true and accurate record of the meeting.

2. Matters arising from the minutes
Agenda item 1: Update the software and config files for the cultural knowledge base and environment knowledge base software to use camel case and send it to Tsegazeab.
Action: Prof. David Vernon has completed the updates needed and sent the software to Tsegazeab.

Agenda item 2: Write the first draft of deliverable D6.1 Use Case Implementation
Action: Prof. David Vernon has completed the first draft and updated the CSSR4Africa website to reflect the changes in the deliverable section.

Agenda item 3: Contact Igor regarding the air conditioning malfunction in the AI and Robotics lab.
Action: Technicians were sent to fix the issue, but the issue wasn't resolved.

3. Review of progress reports
Team members have noted going through each other's progress reports and decided to discuss the issues raised in the report, as stated in today's agenda.

4. Remaining deliverables: D6.1 and D6.2.
We have noted the email sent from Professor David Vernon stating that the first draft of Deliverable D6.1 Use Case Implementation is finished. Given that Professor David Vernon will be unavailable and Deliverable D6.2 is due at the end of June, the team should be thinking of how to approach D6.2 Use Case Evaluation.

5. Milestones.
The team has gone through Project Milestone version 3. All deliverable reports except D6.2 Use Case Evaluation have been submitted, noting that D6.2 Use Case Evaluation will be submitted by the end of June. The team went through the milestone and stated that some of the software hasn't been submitted, namely D4.2.4 Robot Localization, D5.4.2 Robot Mission Language, and D5.4.3 Robot Mission Interpreter. Muhammed has stated that, since the software submission was due on April 9 and integration testing must be completed by May 7, the responsible party must submit all code for integration immediately so that Adedayo has ample time to review it. For the animate Interim demonstration, Eyerusalem stated that the demo isn't ready for the April 23, 2025, deadline.

6. Status of submission of software.

The team discussed the remaining software. Ibrahim mentioned that he is facing a problem regarding random values being generated for the depth value. He is working on fixing this issue to submit the software by next week. Regarding D5.4.2 Robot Mission Language and D5.4.3 Robot Mission Interpreter, Tsegazeab stated that he will submit his software for integration on April 23, 2025.

7. Status of interim and final demonstrations.

Eyerusalem explained the status of the interim demo, which is due on April 23, 2025. She stated the scenario's XML is ready, but the test hasn't been carried out. She stated that she will be having a meeting with Professor David Vernon tomorrow to discuss the interim demo, possibly handing off the task to another person. Concerning the final demonstration, Muhammed has stated the demo is progressing well and he is awaiting the issues to be fixed in regards to the navigation.

8. Resetting robot pose before navigation.

Birhanu explained the current problem with navigation, where robot navigation cannot find a valid path to any of the goal locations, stating that this is due to a default pose of (0,0,0) being assigned to the robot, which is at the corner of the lab labeled as an obstacle. To solve this issue, the team discussed having the following changed on the alpha version of the behavior controller to have a configurable start pose that will be run just once before the start of the tour. Then, using that parameter behavior controller makes a service call to let the navigation node know the robot's current location. But when the robot's absolute localization node is finished, the behavior controller will call the robot localization reset_pose service to reset the robot's current pose, and the temporary configuration parameter from the behavior controller will be removed. Then it will utilize the environmental knowledge base to determine the starting position of the lab tour.

9. Utility speech class in behaviourController.

Birhanu explained the current issues with the speech class, that a new class has to be created for each utterance in the behavior controller. Tsegazeab explained that the behavior controller needs a new class to specify for each utterance for the behavior controller to work. He stated that to avoid a new class being created, a complete redesign of the node is needed. Team members asked Tsegazeab to explain the current flaw of the behavior design and how the new design of the behavior controller could solve it. Tsegazeab stated that he will send an email explaining the details of how the new redesign will work. He stated he will send this email to the team by April 24, 2025. In addition, Tsegazeab was asked why the cultural knowledge base wasn't integrated into the behavior controller, despite his progress report stating it was. He replied that he will send a new version of the behavior controller with the cultural knowledge base integrated and remove any hard-coded utterances stored in the behavior controller. He will send the new version by April 23, 2025.

10. Afretec Network Principal Investigators Meeting.

The chairman stated that Professor David Vernon has sent an email regarding the Afretec Network and that Professor David Vernon will recycle the latest poster, and he will write the abstract based on the Cultural Robotics paper.

11. Failure handling.

Tsegazeab explained the current status of the Failure Handling. He stated he finished the discussion with each node owner about possible failure points, and he is currently working on a compilation of the report that will be sent to the team. Tsegazeab stated that he will send the report by April 23, 2025.

12. Any Other Business

Clifford explained the current issue with the speech event, and ASR transcribes the speech when text-to-speech is invoked. Muhammed suggested making some of the phrases shorter, stating that the phrase "I can only understand yes or no" can be ambiguous for the ASR to transcribe. He suggested removing these phrases and using commonly accepted phrases like: yes, sure. Tsegazeab has agreed to make this change by April 23, 2025. In addition, the team suggested that the behavior controller use services for the speech event to stop incoming ASR transcription when the text-to-speech node is running. Stating that the speech event will only run when no text-to-speech node is running, resulting in transcription of speech coming from the Pepper robot. Tsegazeab and Clifford agreed to make these changes to their respective nodes by April 25, 2025.

13. Date and time of next meeting

The next meeting will be held on 28th April 2025 at 12:00 p.m.

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	Contact Igor regarding the air conditioning malfunction in the AI and Robotics lab.	D. Vernon	Unspecified
2	Send an email explaining the current flaw of how the speech class is designed in the behavior controller, and the proposed changes.	T. Tefferi	24th April 2025
3	Send the new alpha version of the behavior controller to the team members.	T. Tefferi	23rd April 2025
4	Adding a temporary configuration parameter to rest the pose for the navigation node.	T. Tefferi	23rd April 2025
5	Failure Handling Report.	T. Tefferi	23rd April 2025
6	Adding a ROS service to the behavior controller to enable/disable ASR.	T. Tefferi	25th April 2025
7	Adding a ROS service to the speech event to enable/disable ASR.	C. Onyonka	25th April 2025
8	Use shorter phrases in the TTS and add alternative prompts for yes and no.	T. Tefferi	23rd April 2025
9	Change the cultural knowledge base to remove the long phrase.	D. Vernon	Unspecified

Table 1: Action Items