

<b>Meeting Date:</b>	<b>04.02.2025</b>	<b>Semester:</b>	<b>07</b>	<b>Week:</b>	<b>01</b>
<b>Work carried out since the last meeting</b>					
<div><div>1. Selected the project topic from the given list.</div><div>2. Reviewed the project proposal provided by the supervisor.</div><div>3. Attended a meeting with the supervisor to discuss:<div><div>● Project requirements and expectations.</div><div>● The importance of automating parameters in the infant incubator.</div><div>● The need to identify which parameters should be automated.</div></div></div></div>					
<b>Work planned for the coming week</b>					
<div><div>1. Research and list existing infant incubator systems.</div></div>					
<b>Signature of the supervisor:</b>					

<b>Meeting Date:</b>	<b>11.02.2025</b>	<b>Semester:</b>	<b>07</b>	<b>Week:</b>	<b>02</b>
<b>Work carried out since the last meeting</b>					
<div><div>1. Researched existing infant incubator systems and technologies.</div><div>2. Collected information on how current incubators work and their parameters.</div></div>					
<b>Work planned for the coming week</b>					
<div><div>1. Identify all possible parameters controlled and monitored in an infant incubator.</div></div>					
<b>Signature of the supervisor:</b>					

<b>Meeting Date:</b>	<b>18.02.2025</b>	<b>Semester:</b>	<b>07</b>	<b>Week:</b>	<b>03</b>
<b>Work carried out since the last meeting</b>					
<div><div>1. Research and list all possible parameters controlled and monitored in an infant incubator (e.g., temperature, age, weight, humidity, oxygen level, heart rate, respiratory rate).</div><div>2. Analyze and select the most critical parameters suitable for automation.</div></div>					
<b>Work planned for the coming week</b>					
<div><div>1. Contact hospitals to schedule and plan the NICU visit.</div></div>					
<b>Signature of the supervisor:</b>					

<b>Meeting Date:</b>	<b>25.02.2025</b>	<b>Semester:</b>	<b>07</b>	<b>Week:</b>	<b>04</b>
<b>Work carried out since the last meeting</b>					
<div><ol style="list-style-type: none"><li>1. Contact hospitals to get permission to visit the NICU and observe a live incubator.</li><li>2. Document findings from research and NICU observation for proposal preparation.</li></ol></div>					
<b>Work planned for the coming week</b>					
<div><ol style="list-style-type: none"><li>1. Get the permission to visit NICU at Karapitiya Hospital.</li></ol></div>					
<b>Signature of the supervisor:</b>					

<b>Meeting Date:</b>	<b>04.03.2025</b>	<b>Semester:</b>	<b>07</b>	<b>Week:</b>	<b>05</b>
<b>Work carried out since the last meeting</b>					
<ol style="list-style-type: none"> <li>1. Obtained permission to visit the NICU at Karapitiya Teaching Hospital.</li> <li>2. Visited the NICU and observed the live incubators in operation and discussed with doctors and nurses about the working process of the incubators.</li> <li>3. Identified temperature as the most critical parameter monitored directly by the incubator.</li> <li>4. Learned that heart rate, oxygen level, and respiratory rate are monitored separately using other instruments connected to the baby.</li> <li>5. Received feedback that integrating all these monitoring systems into the incubator would be beneficial.</li> <li>6. Observed that parents have limited visiting times due to NICU being a critical area.</li> </ol>					
<b>Work planned for the coming week</b>					
<ol style="list-style-type: none"> <li>1. Discuss the NICU observations with the supervisor and select the project scope.</li> </ol>					
<b>Signature of the supervisor:</b>					

Meeting Date:	11.03.2025	Semester:	07	Week:	06
<b>Work carried out since the last meeting</b>					
<ol style="list-style-type: none"><li>1. Had a follow-up meeting with the supervisor to discuss observations from the NICU visit.</li><li>2. Supervisor advised us to start drafting the project proposal.</li><li>3. Discussed the possibility of using machine learning algorithms and the need to decide what predictions the system should make.</li></ol>					
<b>Work planned for the coming week</b>					
<ol style="list-style-type: none"><li>1. Start preparing the project proposal based on the supervisor's guidance and NICU observations.</li><li>2. Continue gathering additional research materials related to automated incubator systems and neonatal care for the proposal.</li></ol>					
<b>Signature of the supervisor:</b>					

<b>Meeting Date:</b>	<b>18.03.2025</b>	<b>Semester:</b>	<b>07</b>	<b>Week:</b>	<b>07</b>
<b>Work carried out since the last meeting</b>					
<div><ol style="list-style-type: none"><li>1. Prepared the project proposal based on NICU observations and supervisor's guidance.</li><li>2. Identified the lack of predictive capability in current incubators to detect infant distress or abnormal status.</li><li>3. Selected infant distress prediction as the machine learning application for the project.</li><li>4. Planned to add a remote monitoring feature for doctors and parents to watch the baby's condition without physically engaging.</li></ol></div>					
<b>Work planned for the coming week</b>					
<div><ol style="list-style-type: none"><li>1. Correct citation mistakes in the project proposal as per supervisor's feedback.</li><li>2. Revise and reduce the budget estimation in the proposal.</li><li>3. Finalize the project proposal document and submit.</li></ol></div>					
<b>Signature of the supervisor:</b>					

Meeting Date:	25.03.2025	Semester:	07	Week:	08
<b>Work carried out since the last meeting</b>					
<ol style="list-style-type: none"><li>1. Searched for publicly available datasets.</li><li>2. Found cry detection dataset and jaundice detection dataset from Kaggle.</li></ol>					
<b>Work planned for the coming week</b>					
<ol style="list-style-type: none"><li>1. Further research on:<ul style="list-style-type: none"><li>• Machine learning models for predicting infant distress.</li><li>• Technology options for implementing remote monitoring.</li></ul></li></ol>					
<b>Signature of the supervisor:</b>					



<b>Meeting Date:</b>	<b>01.04.2025</b>	<b>Semester:</b>	<b>07</b>	<b>Week:</b>	<b>09</b>
<b>Work carried out since the last meeting</b>					
<div>1. Changed the Scope of the project to address the problems discussed in the evaluation. 2. Created the revised project proposal and submit the report.</div>					
<b>Work planned for the coming week</b>					
<div>1. Start implementing the project by collecting requirements.</div>					
<b>Signature of the supervisor:</b>					

<b>Meeting Date:</b>	<b>08.04.2025</b>	<b>Semester:</b>		<b>Week:</b>	<b>10</b>
<b>Work carried out since the last meeting</b>					
<p>6<sup>th</sup> Semester Exam Study Leave.</p>					
<b>Work planned for the coming week</b>					
<b>Signature of the supervisor:</b>					

<b>Meeting Date:</b>	<b>15.04.2025</b>	<b>Semester:</b>		<b>Week:</b>	<b>11</b>
<b>Work carried out since the last meeting</b>					
<p>6<sup>th</sup> Semester Exam.</p>					
<b>Work planned for the coming week</b>					
<b>Signature of the supervisor:</b>					

Meeting Date:	22.04.2025	Semester:		Week:	12
Work carried out since the last meeting					
<p>6<sup>th</sup> Semester Exam.</p>					
Work planned for the coming week					
Signature of the supervisor:					

Meeting Date:	29.04.2025	Semester:		Week:	13
<b>Work carried out since the last meeting</b>					
<div><div>1. Collected project requirements and studied similar systems.</div><div>2. Planned system architecture and defined key modules.</div></div>					
<b>Work planned for the coming week</b>					
<div><div>1. Start training a machine learning model for Jaundice detection</div></div>					
<b>Signature of the supervisor:</b>					

Meeting Date:	06.05.2025	Semester:		Week:	14
<b>Work carried out since the last meeting</b>					
<div><ol style="list-style-type: none"><li>1. Divided responsibilities within group.</li><li>2. Assigned to complete ML pipelines and system integration.</li><li>3. Finalized shared resources for each member in GitHub, Colab and google drive.</li></ol></div>					
<b>Work planned for the coming week</b>					
<div><ol style="list-style-type: none"><li>1. Starting setup environment to train the jaundice model</li></ol></div>					
<b>Signature of the supervisor:</b>					

Meeting Date:	13.05.2025	Semester:		Week:	15
<b>Work carried out since the last meeting</b>					
<ol style="list-style-type: none"><li>1. Initiated training pipeline using Kaggle dataset.</li><li>2. Applied MobileNetV3-Small architecture with transfer learning.</li><li>3. Introduced lighting-robust enhancements (CLAHE, brightness detection).</li><li>4. Trained model with 10 epochs and evaluated base vs. robust accuracy.</li></ol>					
<b>Work planned for the coming week</b>					
<ol style="list-style-type: none"><li>1. Export model to ONNX and build demo UI.</li></ol>					
<b>Signature of the supervisor:</b>					

Meeting Date:	20.05.2025	Semester:		Week:	16
<b>Work carried out since the last meeting</b>					
<div><ol style="list-style-type: none"><li>1. Built local Streamlit web app with webcam integration.</li><li>2. Integrated brightness-aware feedback and confidence score.</li><li>3. Tested predictions using baby image samples.</li></ol></div>					
<b>Work planned for the coming week</b>					
<div><ol style="list-style-type: none"><li>1. Prepare Raspberry Pi environment and test deployment.</li></ol></div>					
<b>Signature of the supervisor:</b>					



Meeting Date:	27.05.2025	Semester:		Week:	17
<b>Work carried out since the last meeting</b>					
<ol style="list-style-type: none"><li>1. Installed Raspberry Pi OS Desktop (32-bit); faced compatibility issues.</li><li>2. Then flashed 64-bit Lite OS; configured SSH and terminal access.</li><li>3. Installed Python, OpenCV, PyTorch, ONNX Runtime and other dependencies</li></ol>					
<b>Work planned for the coming week</b>					
<ol style="list-style-type: none"><li>1. Deploy ONNX model to Pi and test.</li></ol>					
<b>Signature of the supervisor:</b>					

<b>Meeting Date:</b>	<b>03.06.2025</b>	<b>Semester:</b>		<b>Week:</b>	<b>18</b>
<b>Work carried out since the last meeting</b>					
<div><ol style="list-style-type: none"><li>1. Successfully ran ONNX model on Pi using terminal.</li><li>2. Verified predictions from webcam input.</li><li>3. Adjusted camera settings for light handling.</li></ol></div>					
<b>Work planned for the coming week</b>					
<div><ol style="list-style-type: none"><li>1. Begin test audio recording and processing.</li></ol></div>					
<b>Signature of the supervisor:</b>					

Meeting Date:	10.06.2025	Semester:		Week:	19
<b>Work carried out since the last meeting</b>					
<div><ol style="list-style-type: none"><li>1. Recorded audio samples using webcam mic.</li><li>2. Confirmed mic input and waveform detection.</li><li>3. Evaluated audio clarity and duration for training.</li></ol></div>					
<b>Work planned for the coming week</b>					
<div><ol style="list-style-type: none"><li>1. Explore ML model integration for cry classification.</li></ol></div>					
<b>Signature of the supervisor:</b>					

Meeting Date:	17.06.2025	Semester:		Week:	20
<b>Work carried out since the last meeting</b>					
<ol style="list-style-type: none"><li>1. Integrated webcam stream with local prediction pipeline.</li><li>2. Combined live jaundice detection and real-time camera preview.</li><li>3. Confirmed model inference and UI feedback loop.</li></ol>					
<b>Work planned for the coming week</b>					
<ol style="list-style-type: none"><li>1. Continue multi-model integration testing.</li></ol>					
<b>Signature of the supervisor:</b>					

<b>Meeting Date:</b>	<b>24.06.2025</b>	<b>Semester:</b>		<b>Week:</b>	<b>21</b>
<b>Work carried out since the last meeting</b>					
<div><div>1. Finalized setup to support parallel ML processes on Pi.</div><div>2. Tested system load and performance.</div><div>3. Added environmental sensor data collection and monitoring.</div></div>					
<b>Work planned for the coming week</b>					
<div><div>1. Prepare images and test samples for LCD reader model.</div></div>					
<b>Signature of the supervisor:</b>					

Meeting Date:	01.07.2025	Semester:		Week:	22
Work carried out since the last meeting					
<p>7<sup>th</sup> Semester Exam Study Leave.</p>					
Work planned for the coming week					
Signature of the supervisor:					

Meeting Date:	08.07.2025	Semester:		Week:	23
Work carried out since the last meeting					
<p>7<sup>th</sup> Semester Exam.</p>					
Work planned for the coming week					
Signature of the supervisor:					

Meeting Date:	15.07.2025	Semester:		Week:	24
Work carried out since the last meeting					
<p>7<sup>th</sup> Semester Exam.</p>					
Work planned for the coming week					
Signature of the supervisor:					



Meeting Date:	22.07.2025	Semester:		Week:	25
<b>Work carried out since the last meeting</b>					
<ol style="list-style-type: none"><li>1. Captured incubator display images from NICU.</li><li>2. Analyzed sample variations and lighting conditions.</li><li>3. Shared data with teammate handling LCD OCR model.</li></ol>					
<b>Work planned for the coming week</b>					
<ol style="list-style-type: none"><li>1. Write and review Methodology section.</li></ol>					
<b>Signature of the supervisor:</b>					

<b>Meeting Date:</b>	<b>29.07.2025</b>	<b>Semester:</b>		<b>Week:</b>	<b>26</b>
<b>Work carried out since the last meeting</b>					
<div><div>1. Reviewed current system and re-tested ML pipelines.</div><div>2. Validated robustness and logging features.</div></div>					
<b>Work planned for the coming week</b>					
<div><div>1. Start drafting individual progress report.</div></div>					
<b>Signature of the supervisor:</b>					

<b>Meeting Date:</b>	<b>05.08.2025</b>	<b>Semester:</b>		<b>Week:</b>	<b>27</b>
<b>Work carried out since the last meeting</b>					
<div><ol style="list-style-type: none"><li>1. Drafted Jaundice model methodology and architecture explanation.</li><li>2. Wrote system integration narrative for Raspberry Pi setup.</li><li>3. Collected visuals and architecture diagrams.</li><li>4. Completed progress report of worked parts.</li><li>5. Formatted and finalized logbook for submission.</li></ol></div>					
<b>Work planned for the coming week</b>					
<div><ol style="list-style-type: none"><li>1. Submit the project progress report and ready for the progress evaluation.</li></ol></div>					
<b>Signature of the supervisor:</b>					