List of inductive codes applied to transcripts of researchers (translator and moderators) utterances		List of inductive codes applied to transcripts of participants utterances		
Tag	Meaning/Use	Tag	Meaning/Use	
	Detailed account of the behaviour (i.e., sequence of actions and logic operation) executed by the robot either in simulation or in the hardware	<ask clarification="" for=""></ask>	Any question or comment said by participants with which they seek for confirm and/or improve their understanding about the resources and purpose of the workshop	
	Provide details or explanation of what the robot is doing.	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Comments related to the overall intended function of the robot within the chosen scenario	
<explain behavior=""></explain>	Detailed account of the behaviour (i.e., sequence of actions and logic operation) programmed by the translator and that best approximates participants' design. This happens often during behavior demonstration		Any physical and/or programming limitation of the robot as identified/understood by participants	
<introduce background=""></introduce>	Explanation about the scenario (physical space and social context) in which the robot is placed and that participants should keep in mind when designing robots' behaviours	<robot limits=""></robot>	When the physical design (hardware), appearance and programmed functionalies (software) of the robot are perceived as limiting for its intended function	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Whenever the researchers provide further explanation and guidence regarding the choice of function and actions for the robot (usually during brainstorming phase). This is always in answer to an explicit query from the participants	<unsuitable goal=""></unsuitable>	When a robot action and/or function suggested for the robot does not fit with participants' perception of robots capabilities and/or the chosen scenario	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Whenever the researchers encourage participant to engage in a workshop activity, such as discuss work around (or give a try) of a possible robot function, behaviour, and/or robot primitive	<accept suggestion=""></accept>	Whenever participants agreed on suggestions made by the researchers in regards of possible robot actions and/or functions	
<pre><encouragement></encouragement></pre>	Researchers comments intended to keep the flow of the discussion, brainstorming, and behaviour design process	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Comments related to the specific actions and logic flow the robot should take to accomplish a goal associated to its intended function (usually at the start of the workshop)	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Whenever researchers asked participants to further elaborate, think and/or explain what a chosen robot function, behavior, and/or action will imply. This label applies only to queries from researcher to participant	<call discussion="" for=""></call>	Whenever one participant asked other participant for their input and thoughts on a proposed behavior, function, action, and change	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Whenever the moderator asked the translator to further elaborate on the robot's capabilities. This label applies only to queries from researcher (moderator) to researcher (translator)	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Whenever participants made suggestions on how to solve an execution failure during programming and debugging. This includes adjustments to primitives parameters, replacement of part or whole of a primitive to address an evaluation	
<pre><pre><pre><pre>propose action></pre></pre></pre></pre>	Suggestions made by researchers related to workshop activities, e.g., seeing the behaviour, controlling the pace of the workshop or encouraging participants or another research to move on onto another workshop activity	<pre><performance failure=""></performance></pre>	Whenever participants observed and commented on a technical and/or programming failure during the execution of the robot's behaviors	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Suggestions made by the translator on how to best approximate an action/behavior in the robot given the available primitives	<inappropriate behavior=""></inappropriate>	Whenever participants identified that although the robot behaviour executed as designed, the outcome appears inappropriate in the given context	
<identify failure=""></identify>	Whenever the translator observed that there was an inconsistency between the programmed and executed behavior (e.g., condition was skipped or never verified)		Participants comments on previous experiences and/or knowledge about other service robots and how these robots do things	
<debugging></debugging>	Whenever the translator went throught the process of understanding and identifying why a behavior was not executed as programmed	<refer experience="" to=""></refer>	When participants refer to previous experience encountering robots, seeing robots being used in some context, or related scenarios	
<pre><pre><pre><pre>opinion></pre></pre></pre></pre>	Whenever the moderator commented on reasons for an execution failure and/or participants' comments and perceptions	<pre><pre><pre><pre>open addition></pre></pre></pre></pre>	Whenever participants decided to amend an existing behavior by adding a new primitive to it	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Whenever the moderator asked participants to comment and assess the robot behaviors after seeing its execution in simulation or in the real robot	<explain behavior="" proposed=""></explain>	Whenever participants elaborated on their reasoning behind a new behavior or change to an existing behavior	
<summarize discussion=""></summarize>	Whenever a researcher paraphrased participants comments and/or desing decisions as a way of confirming their understanding on what the current robot's behavior is missing	<interaction -="" engagement="" failure=""></interaction>	Whenever participants identified that as currently implement the robot's behavior is likely to not address the interaction flow properly and fail to engage the intended audience	
<confirm intention=""></confirm>	Whenever researchers confirm participants intentions regarding the changes to the robot's current behavior or a specific question. Most of the times this queries can be answered with a yes or no	<clarification reasoning=""></clarification>	Whenever participants further elaborated on their choices in response to a researcher's prompts and questions and other participants calls for clarification	
<implement behavior=""></implement>	Further details on how specific robot actions are implemented using the available primitives and logic operators	<positive></positive>	Whenever participants made optimistic comments regarding the robot's behavior and how the current implementation is appropriate	
<time management=""></time>	Comments related to the logistics (in time) of the workshop	<social context=""></social>	Whenver participants comment on the social role and presence of the robot in the chosen scenario. Mentions of cultural background, social norms	
	Whenever the translator presented any additional tool (e.g., Rviz feed) that could provide further insight on how and why the robot is behaving in a given way	<accept clarification=""></accept>	Whenever a participant confirmed that the clarification question has been answered	
	A member of the research team presents and explains the different resources (i.e, robot, cheat-sheet, simulator, programming interface, and translator) that are at the disposal of all participants during the workshop	<unexpected behavior=""></unexpected>	When the robot behaviour was perceived as a surprise	
	Whenever the translator provided details about robot routines and/or primitives available to the participants	<pre><choose behavior=""></choose></pre>	Whenever participants make a choice among the implementation options provided by the translator	

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	When the researchers made mention of the resources (programming aids and tools, and robot hardware and primitives) available to the participants	diability concern>	When the robot behavior was perceived as problematic due to potential legal issues
<explain resources=""></explain>	Whenever the translator provided additional details on existing resources, i.e., progamming interface	<spatial context=""></spatial>	Whenever participants reflect/comment on how the robot's behavior is in alignment or misaligment w.r.t to the physical context and/or space in which is located. For example, the chosen location and characteristics of this location, physical aspects of the robot (e.g., too big, too small)
<pre><robot speech=""></robot></pre>	Sentences the robot said during demo with physical robot	<user context=""></user>	Whenever participants reflect/comment on how the robot's behavior is in alignment or misaligment w.r.t to characteristics of the intended end-user or interactee (i.e., their profile)
Nobol speech	Whenever the translator presented the participants with multiple options on how	-user context>	Initialignment w.r.t to characteristics of the interioed end-user of interactee (i.e., their profile)
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	an action/functionality could be implemented and prompted them to decide on the best option	<pre><pre><pre><pre>open removal></pre></pre></pre></pre>	Whenever participants decided to amend an existing behavior by removing a primitive
<identify limitation=""></identify>	Whenever the translator identified limitations in primitives implementations, robot controllers, or the programming tool (it applies specifically to the instant in which limitation is first seen/identified and it should be followed by an explanation of the type of limitation)	<anthropomorphize></anthropomorphize>	Whenever participants attributed human characteristics to the robot
<refer simulation="" to=""></refer>	Comments related to the differences in perception and execution of a robot's behavior between the simulator and the physical robot	<indifferent></indifferent>	Neither positive nor negative perception on the robot's observed behavior
<robot limitation=""></robot>	Whenever the translator commented on an existing hardware/software limitation of the robot (Pepper or Fetch) identified by any workshop attendee	<safety concern=""></safety>	When the robot's behavior was perceived as problematic due to potential safety risks
<resources -="" limitation="" setup=""></resources>	Anything other than the robot. I.e., programming interface, cheat-sheet, zoom setup	<ethical concern=""></ethical>	When the robot's behavior was perceived as problematic due to potential ethical/moral issues
	Whenever the translator commented on how the progamming interface or set of implemented primitives constrained/limited what the robot could do during the workshop	<pre><pre><pre><pre>propose replacement></pre></pre></pre></pre>	Whenever participants decided to amend an existing behavior by replacing an existing primitive or adjusting the parameters of this primitive
	Whenever the translator provides further details on a technical failure on the programming interface or coding identified by the translator themselves or the participant		The filling words, include "Mmm", "yeah", "okay", "oh", "you know"
	The filling words, include "Mmm", "yeah", "okay", "oh", "you know"		Sentences that do not make sense or do not seem meaningful in the context of the workshop
	Sentences that do not make sense or do not seem meaningful in the context of the workshop	<fillers></fillers>	<exclude>: One single word sentences that seem to belong to previous or next line should be assigned the label of the previous or next sentence</exclude>
<fillers></fillers>	<exclude>: One single word sentences that seem to belong to previous or next line should be assigned the label of the previous or next sentence</exclude>		
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Any computer work/manipulation other than robot behavior implementation done by the translator in preparation to showcase/demonstrate current robot execution to participants		