

The data used in the DialAM-2024 shared task is in the Argument Interchange Format (AIF), a JSON-based format that allows to effectively encode all the information of the Inference Anchoring Theory (IAT) annotations. Debates are splitted into different argument maps which are stored in *.json* files with the following structure:

```
{
"nodes": [],
"edges": [],
"locutions": []
}
```

Where “nodes” contain the full list of nodes in the argument map, and each node is structured as follows:

```
{
"nodeID": "691137",
"text": "in Scotland do something about it",
"type": "L",
"timestamp": "2021-04-29 19:52:22"
}
```

Containing a node ID (which will be highly relevant to the edges in order to preserve the graph structure depicted above), the natural language text included in the node, the type of the node, and a timestamp.

It is important to mention that argument propositions (I-nodes) and locutions (L-nodes) will contain natural language text belonging to the argumentative propositions and the locutions respectively, but other types of nodes such as the illocutionary connections YA-nodes, transition TA-nodes, and relational S-nodes (RA for Inference, CA for Conflict, and MA for Rephrase) will include a class descriptor in the “text” field as in the examples below:

```
{
"nodeID": "1029937",
"text": "Default Inference",
"type": "RA",
"timestamp": "2022-07-25 11:16:11",
"scheme": "Default Inference",
"schemeID": "72"
}
```

```
{
"nodeID": "1029941",
"text": "Asserting",
"type": "YA",
"timestamp": "2022-07-25 11:16:11",
"scheme": "Asserting",
"schemeID": "74"
}
```

The key “edges” contains the complete set of edges linking the nodes in the argument map. This way, with the information contained in “nodes” and “edges”, it is possible to structure all the information belonging to the dialogue and to the argumentation as a graph. The elements contained in the “edges” list are structured as follows:

```
{  
"edgeID": "1362656",  
"fromID": "691138",  
"toID": "1029922",  
"formEdgeID": null  
}
```

With a unique edge ID, the ID of the node from which the edge departs, and the ID of the node to which the edge arrives.

Finally, **the key “locutions” contains information of the author** of each locution and additional time information registered in the timestamps:

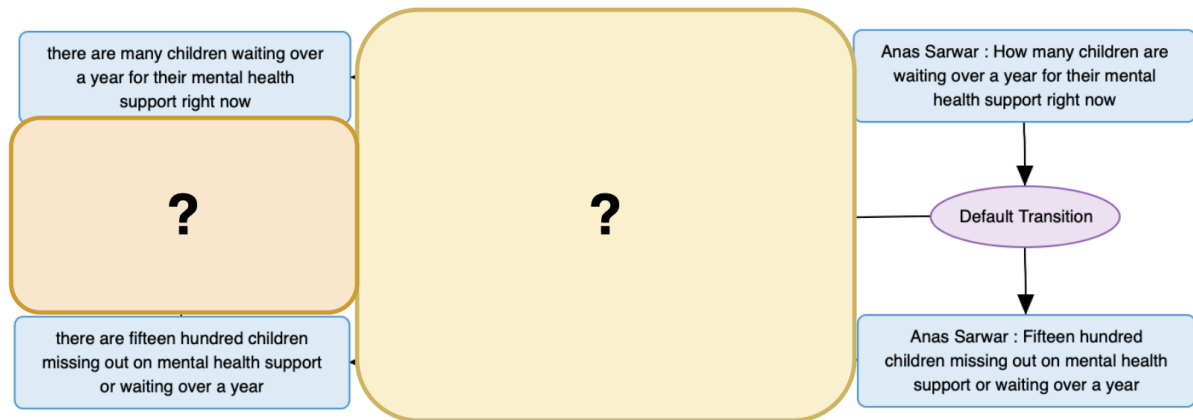
```
{  
"nodeID": "512589",  
"personID": "3869",  
"timestamp": "2020-05-28 20:26:48",  
"start": "2020-05-21 23:25:45",  
"end": null,  
"source": null  
}
```

In this case, the locution associated with the ID “512589” was said by the person identified with the ID “3869”. This way, it is also possible to take authorship of the locutions (and therefore argument propositions) into account when modelling the structure of the argumentative dialogue.

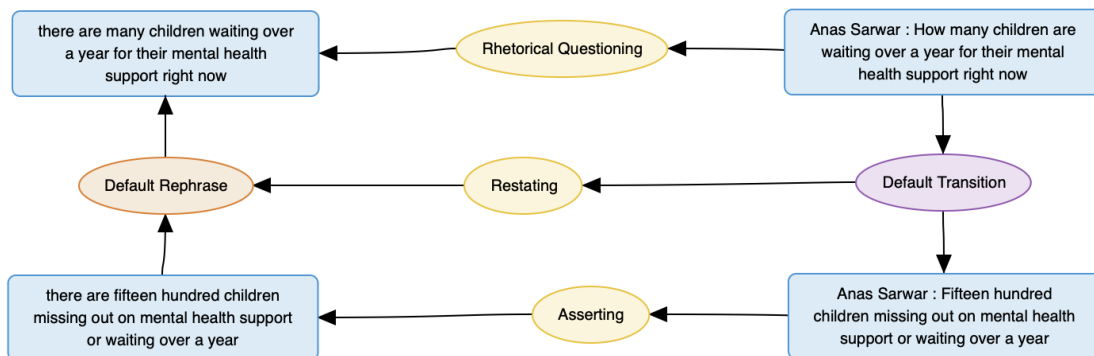
The goal in the DialAM task is to correctly detect illocutionary relations (YA-nodes) and propositional relations (RA-, CA-, and MA-nodes), producing an edited argument map containing these new identified relational nodes together with new edges linking them to the locutions (L-nodes) and the argumentative propositions (I-nodes).

The final submissions will be evaluated using the Precision, Recall, and macro-f1 scores by comparing your produced argument maps with the gold-standard maps (i.e., maps annotated by experts). Evaluation will be carried out at two levels: a sub-task evaluation where the identification of argument relations and the identification of illocutionary relations is done independently, and a general evaluation where both parts are evaluated together.

Let us illustrate it with a simple example with two locutions (L-nodes) and two argumentative propositions (I-nodes). In the test dataset all the information provided will be the set of unlinked I-nodes and a set of L-nodes linked by transitions (TA-nodes) as depicted in the figure below.



The main goal of the DialAM task is therefore twofold. First, to identify the existing relational nodes (RA-, CA-, MA-nodes) between propositions (I-nodes) and generate the respective edges linking all the information in the argument map. Similarly, the second goal is to identify any existing illocutionary relations (YA-nodes) between locutions (L-nodes) and propositions (I-nodes). A good output for the input depicted in the figure above would be the one depicted in the figure below.



It is worth mentioning that any available information in the argument maps (I-nodes, L-nodes, TA-nodes, graph structures represented by the nodes and the edges, authorship, or the own natural language text included in the nodes) can be used when developing your systems, and no specific order is expected for solving the task. Therefore, it can be both valid to first identify argumentative relations between I-nodes and leverage this information to predict the illocutionary relations (YA-nodes), or vice versa.

The quality of the argument map resulting from this inference process will be determined by comparing it against the gold-standard annotated by experts.