

INF2102 – Project Architecture

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1. Class Diagram

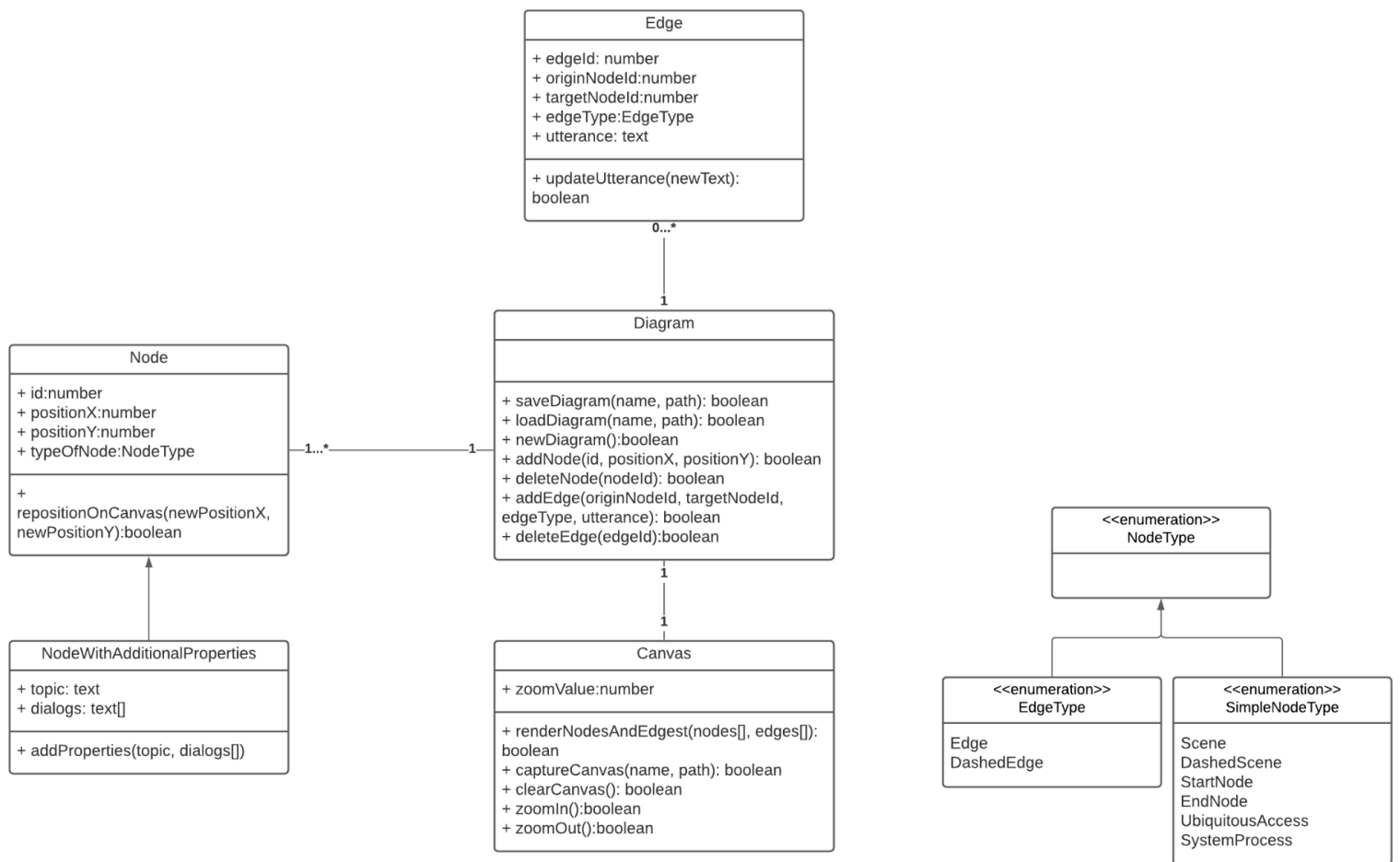


Figure 1 - MoLIC_Builder Class Diagram

2. JSON Data Model

In this section we describe the JSON structures to be used when saving and loading MoLIC Diagrams and its corresponding projects created at MoLIC_Builder.

Diagram File

This JSON structure represents the diagram, which will allow the system to export and import one specific diagram:

In this example, we used the following MoLIC Diagram snippet:

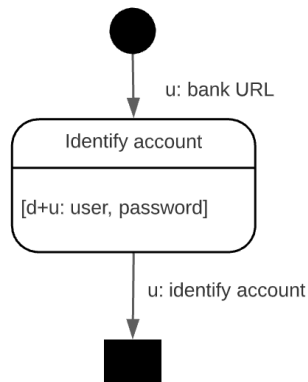


Figure 2: MoLIC Diagram Snippet

The corresponding Diagram JSON Structure is:

```
{
  "diagram": {
    "name": "Lucy's First Diagram",
    "id": 1,
    "creationDate": "2021-06-01 10:27",
    "lastSaved": "2021-06-01 10:27",
    "nodes": [
      {
        "id": 1,
        "positionX": "210px",
        "positionY": "100px",
        "typeOfNode": "StartNode"
      },
    ],
  },
}
```

```

{
  "id": 2,
  "positionX": "210px",
  "positionY": "300px",
  "typeOfNode": "Scene",
  "additionalProperties": {
    "topic": "Identify account",
    "dialogs": "[d+u: user, password]"
  }
},
{
  "id": 3,
  "positionX": "210px",
  "positionY": "500px",
  "typeOfNode": "EndNode"
}
],

"edges": [
  {
    "edgeId": 1,
    "originNodeId": 1,
    "targetNodeId": 2,
    "edgeType": "Edge",
    "utterance": "u: bank URL"
  },
  {
    "edgeId": 2,
    "originNodeId": 2,
    "targetNodeId": 3,
    "edgeType": "Edge",
    "utterance": "u: identify account"
  }
]
}

```

Project File

The following structure, which is not part of the first version of MoLIC_Builder, has the purpose to represent a project, meaning a collection of diagrams that a user can have in its computer and load at once to the application.

Project JSON Structure:

```
{
  "project": {
    "projectName": "Lucy's Project",
    "id": 1,
    "creationDate": "2021-05-17 11:00",
    "lastSaved": "2021-06-01 10:27",
    "diagrams": [{}, {}, {}]
  }
}
```

Note: the property “diagrams” is a collection of diagrams, which is already represented as the Diagram JSON Structure in this document.