

Hacettepe University Department of Computer Engineering
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BİL342 Software Laboratory II
Experiment 2

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Advisors: Prof.Dr. Ersin Töreci, R.A. Ersin Er
Subject: Domain Specific Formal Language Processing
Environment: Java 1.6, Antlr 3.2, JUnit 4.5, Maven 2.2
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1. Software Design Notes

1.1. Software Using Documentation

You can think this project like a new language. We think this experiment is a simple model of the checking submit system but you can use it with different aims.

Software is compared the specific code with given zip file. In the code documentations attributes (mandatory, subject, date etc) are basic elements of the code. This software checks the zip file according to the written code. To use this program with tests is useful.

1.2. Problem and Solution

In this experiment we are designing a specific domain language. A submit system checking model has been wanted from us. We must define firstly basic description (integer, string etc). In the format other improvement descriptions are subject, advisors, enddate, startdate, submitformat. We are using string or integer or other subspecies.

We are defining these descriptions in antlr and for some controls and hold the data we are using java codes. There is a MySubmitModel class. After the definition we are setting all variables to model. So we carry data. If there is some definition characters system is not working.

I follow the flow of the program from the skeleton. In skeleton necessary class has been given. In addition to the skeleton I added MySubmitFormat class.

2. Main Data Structures

```
public class MySubmitFormat {  
    public int numero;  
    public String element_name;  
    public String[] element_order = new String[2];  
    public int item;
```

In MySubmitFormat class these attributes are existing. I do not reprobate the directory, file, filepattern classes separately. I am differentiate these values with numero attributes of the MySubmitFormat object. I separate the arraylists in the checkSubmission.

In the advisors I defined an arraylist for them. Like the submitformat I get them from mysubmitmodel class. These arraylists's definition in the SubmitDsl.g. Definition of the model in here also. I setted all variables with model object, without submitformat.

```
@members {  
    List<String> arrayList = new ArrayList<String>();  
    MySubmitModel model = new MySubmitModel();  
    List<MySubmitFormat> bigList = new ArrayList<MySubmitFormat>();  
}
```