

EasyPet

PLT Team 13

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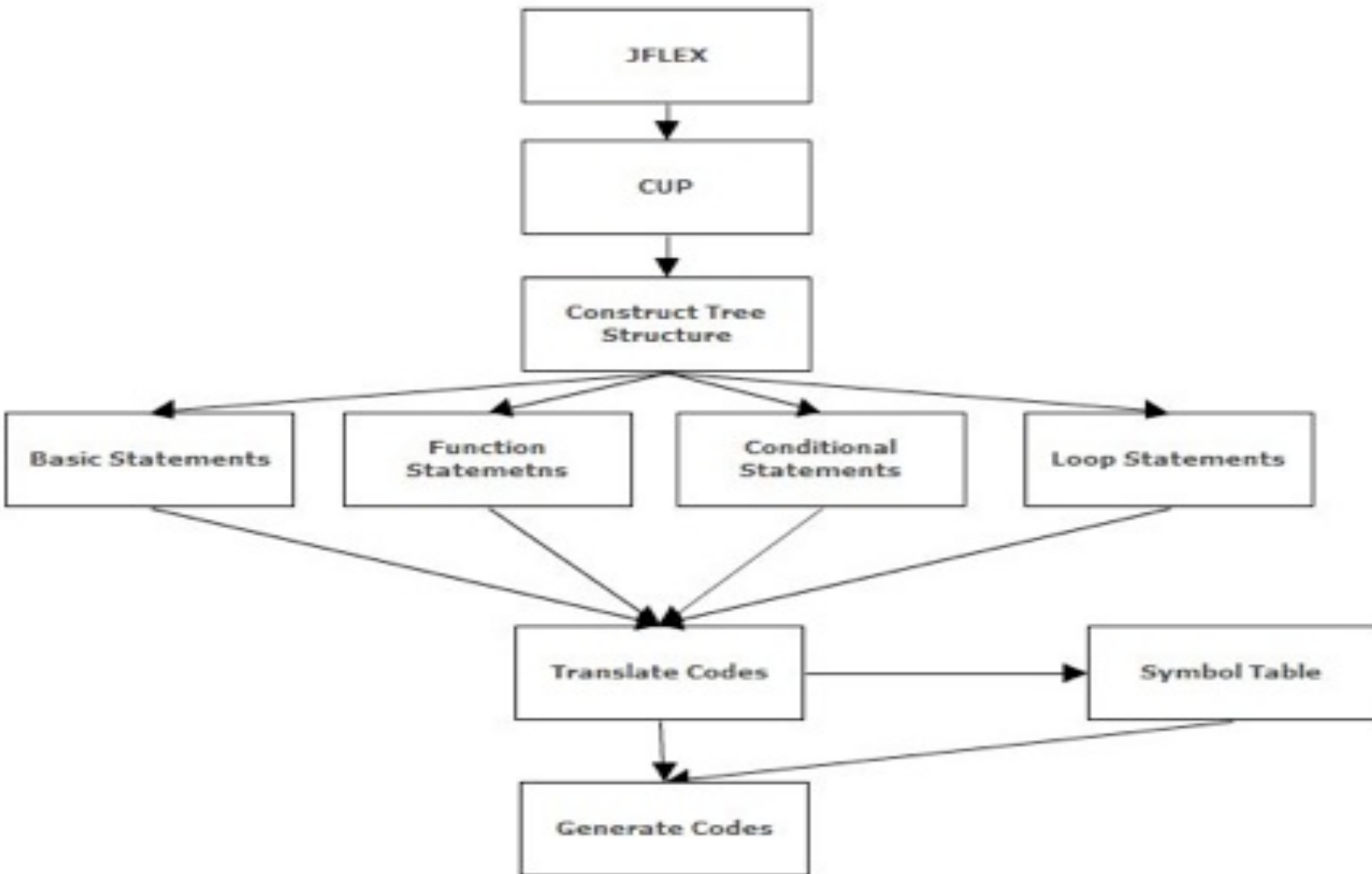
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Introduction

- **What is EasyPet?**
- EasyPet : a programming language used to create electronic pet
- **Why EasyPet?**
- Fast developing
- Easy to use and understand

Design and Implementation



Language Feature

- **EasyPet Language elements**

Data Types:

- int ,string,double, arraylist
- Item, Pet,Panel

Function Types:

- Button function: def_btn
- Timer function: def_timer
- Basic function: def

Sample Program

```
Program sample {  
    Pet Dog {  
        int age = 1;  
        double height = 20.0;  
    }  
    Panel DogPanel{  
        Dog dog;  
        def_btn void test(){  
            dog.age = dog.age +1;  
        }  
        def_timer void test(){  
            dog.height = dog.height +0.5;  
        }  
    }  
}
```

Translator

- Our translators can be divided into three kinds:
- 1. The first kind of translator is used to translate basic blocks
- 2. The second kind of translator is used to translate `def_timer` function
- 3. The third kind of translator is used to translate `def_btn` function
- They are divided into three kinds because we will translate them into very different blocks

Back-end

- GUI design
- Java Swing

Testing

- Unit Testing
- testPet.ep
- testPanel.ep
- testDef.ep
- testDefTimer.ep
- testOperator.ep

Testing

- Integrated Testing
- `testPanelCallPet.ep`
- `testDefTimerCallDef.ep`
- `testSimplePet.ep`
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Challenge

- **Problems we met when developing**
- Ambiguous grammar
- Button function

Summary

- Language Improvement
- Stable
- GUI
- Lessons we learnt
- Teamwork
- Communication

Thank you!