EasyPet

PLT Team 13

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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
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
- ....
Challenge

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

- Language Improvement
- Stable
- GUI
- Lessons we leant
- Teamwork
- Communication
Thank you!