1. Language Motivation

Nowadays, online survey is an important tool, which many of the companies and organizations utilize to draft the data and stats, such as user evaluation, polls and HR studies. Unfortunately, the online survey based on html or flex, is not very easy for novice to develop such a meaningful survey within short time period. Even for experienced developer, writing such survey is tedious and error-prone. There are some survey-generate tool in the market, such as SurveyMonkey (http://www.surveymonkey.com/) and Survey Gizmo (http://www.surveygizmo.com/). But they charge a lot for individuals. The goal of EasySurvey is to simplify this develop process. We will define several key words that are more familiar and easy to understand for inexperienced user. This will make this develop process easy and fun!

2. Language Description

2.1 Introduction
EasySurvey defines a framework that can allow developer to define every component he can imagine in terms of the online survey. User can use “EasySurvey language” to define “Page” to represent the every survey page. And each page can have several “QuestionSet”, each “QuestionSet” can have some numbers of “Question”. Then each question contains its own properties, such as “Title” and “Type” etc.

2.2 Data Types
   Page{…}
   QuestionSet{….}
   Question{….}

2.3 Keywords
   if
   else
   main
   UserInput  (represent the value user input, every question has one userInput)
   RadioBox
   MultipleBox
   DropdownList
   TextField
   LoadFistPage
   END_PAGE (refer to the last default page of the survey)
   NextPage  (indicate the next page of current page)
   Title (refer to the content of the question)
   Type (define the attribute of the question, such as RadioBox, DropdownList, MultipleBox, DropdownList)
2.4 Input and Output
The input will be “Ease Survey” language, the output will be the .mxml file which can be compiled to flex page.

2.5 Condition
Sometime, the jump between pages will be controlled by one particular question (as the sample code showed).

3. Code snippet:
Page page1{
  QuestionSet qs1{
    Question q1{
      Title: “Please fill your name”;
      Type:TextField(10);   //10 character length
    }
    Question q2{
      Title : “Which is/are your favorite fruit(s)?”;
      Type:MultipleSelection{“Apple”, “Pear”, “Banana”
    }
  }
  QuestionSet qs2{
    Question q3{
      Title : “Where do you live?”;
      Type:SingleSelection{“OnCampus”, “OffCampus”};
    }
  }
}
Page page2{
    QuestionSet qs1{
        Question q1{
            Title : "Which Street?";
            Type: TextField(10); // 10 character length
        }
    }
}
Page page3{
    QuestionSet qs1{
        Question q1{
            Title : "Which district?";
            Type: SingleSelection{“Manhattan”, “Queens”, “Bronx”, “Brooklyn”};
        }
    }
}
Main(){
    LoadFistPage page1;
    If (page1.qs2.q3.UserInput == “OnCampus”){
        page1.nextPage=page2;
        page2.nextPage=END_PAGE;
    }
    else{
        page1.nextPage=page3;
        page3.nextPage=END_PAGE;
    }
}