

REDACTED (subject to change)

A CASE tool commissioned by Bailey Segail, made by Olly Clissold

Wise programmer Bailey Segail set out on a journey to seek the much wiser Olly Clissold to make a program that makes programs. Bailey's stage love for project documentation was his main drive and this confused Grand Master Olly but he set that aside and made this program REDACTED. Bailey has his own major software project to work on, and he would like to easily automate the documentation process.

Problem description:

The client has asked that making data dictionaries and reference manuals are too time consuming. The Client has asked that he wants an automated program that will scan his source code to make him the required documentation. The formats for the exports will be in .XML format.

Alternative solutions:

Alternative solutions have been looked into but many of them are for databases which doesn't fulfil the client's requirements for it to be compatible with Java. The cost of alternative solutions is also an issue as my client doesn't spend too much money.

Social and ethical considerations:

With the creation of this program there are no immediate social issues as it doesn't target any large majorities of people nor does it make any opinions that could offend people. Ethically I may have to refurbish other people's code online that may be protected but this will be actively worked against.

Client and program requirements:

Makes a data dictionary	Produces an array of classes and variables
makes a reference manual	retrieves commented lines
exports the programs in .XML format	determines between languages
Reads a program	imports files

System level test data:

Input	Output
Click open	Labels the location for the file
Click make Data dictionary	Data dictionary is produced

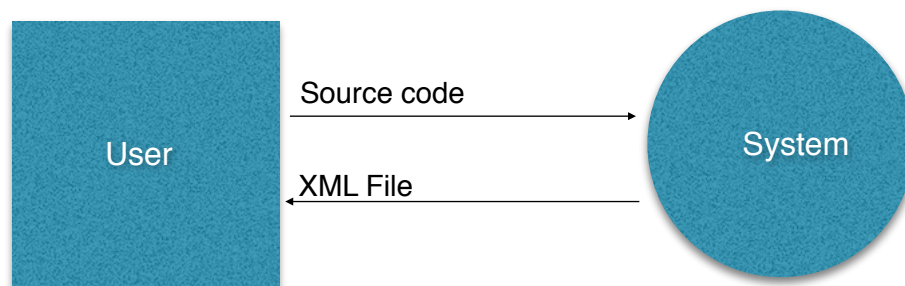
System boundaries:

A boundary of the system is the amount of languages that it can accept for processing as it will only be able to import languages if they are hard coded. a boundary is that it will only work for swift compatible environments.

Compatibility issues:

Compatibility issues for this program include that it will only be able to be run on OS X 10.10 as currently the language it is in will be swift.

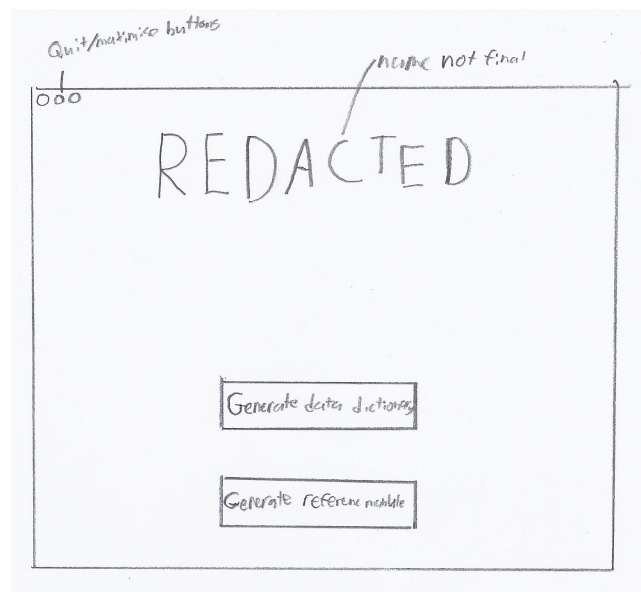
Input	Process	Output
What language	Scan files	XML file
file to scan	Create Arrays	
	Format XML file	



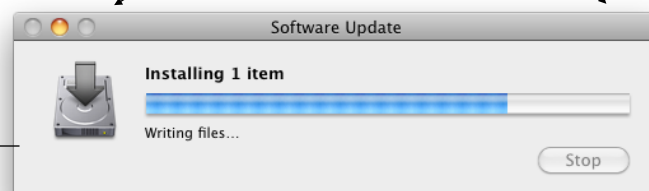
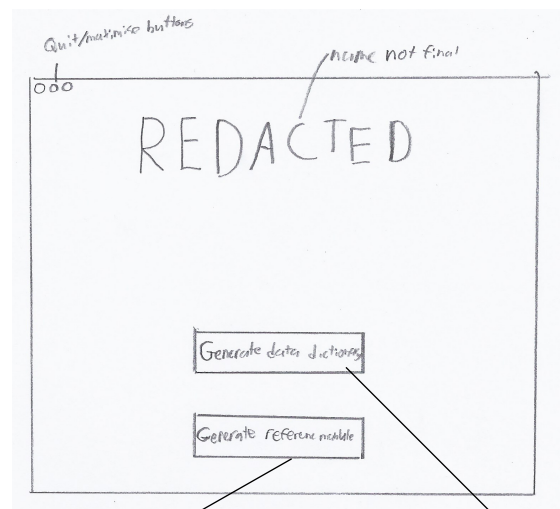
Main data:

- Array of records that stores each variable and a description of what it is if provided
- Array of records that stores each function and a description of what it does if provided
- A string of what language it is
- A string of the file location
- format data for the XML file for output

Annotated screen design:



Storyboard:



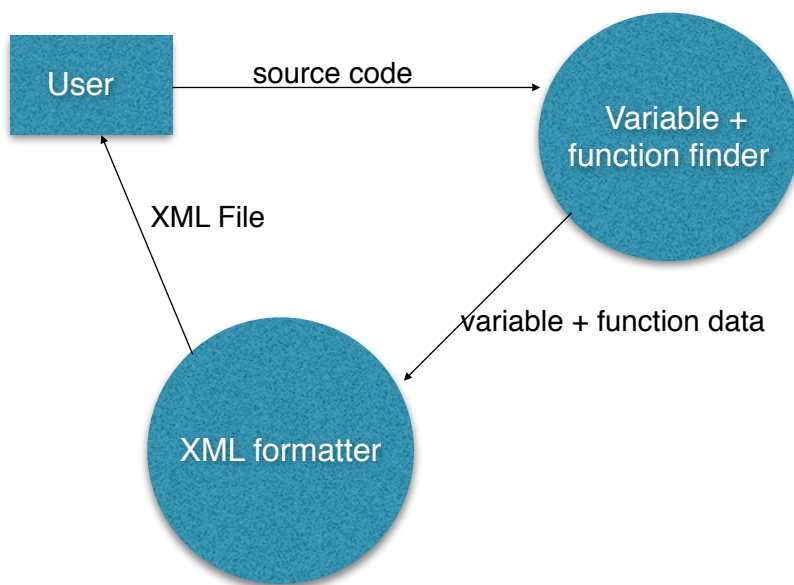
- 2 - The Language
 - 2.1 - Lexical Conventions
 - 2.2 - Values and Types
 - 2.2.1 - Coercion
 - 2.3 - Variables
 - 2.4 - Statements
 - 2.4.1 - Chunks
 - 2.4.2 - Blocks
 - 2.4.3 - Assignment
 - 2.4.4 - Control Structures
 - 2.4.5 - For Statement
 - 2.4.6 - Function Calls as Statements
 - 2.4.7 - Local Declarations
 - 2.5 - Expressions
 - 2.5.1 - Arithmetic Operators
 - 2.5.2 - Relational Operators
 - 2.5.3 - Logical Operators
 - 2.5.4 - Concatenation
 - 2.5.5 - The Length Operator
 - 2.5.6 - Precedence
 - 2.5.7 - Table Constructors
 - 2.5.8 - Function Calls
 - 2.5.9 - Function Definitions
 - 2.6 - Visibility Rules
 - 2.7 - Error Handling
 - 2.8 - Metatables
 - 2.9 - Environments
 - 2.10 - Garbage Collection
 - 2.10.1 - Garbage-Collection Metamethods
 - 2.10.2 - Weak Tables
 - 2.11 - Coroutines

A screenshot of the "DB Query Tool" window, connected to a database named "north". The window has a menu bar (File, Tools, Help) and a tabbed interface. The "Table Definition" tab is selected, showing a table with the following columns:

Table Name	Column Name	Data Type	Size	Null...	Description
Categories	CategoryID	int	4	No	
Categories	CategoryName	nvarchar	30	No	Category Name
Categories	Description	ntext	16	Yes	Category Description
Categories	Picture	image	16	Yes	
CustomerCustomerDemo	CustomerID	nchar	10	No	
CustomerCustomerDemo	CustomerTypeID	nchar	20	No	
CustomerDemographics	CustomerTypeID	nchar	20	No	
CustomerDemographics	CustomerDesc	ntext	16	Yes	Customer Description
Customers	CustomerID	nchar	10	No	
Customers	CompanyName	nvarchar	80	No	
Customers	ContactName	nvarchar	60	Yes	
Customers	ContactTitle	nvarchar	60	Yes	

At the bottom of the window, there are "Print" and "Export" buttons.

Data flow diagram:



Gantt chart:

	T4 Week 2	T4 Week 8	T1 Week 5	T2 Week 5
Defining and understanding				
Planing and designing				
Imlementing, testing and evaluating				