

S.E Mini-Project 1 Release Document

Group-3

Experiment-6

Team -

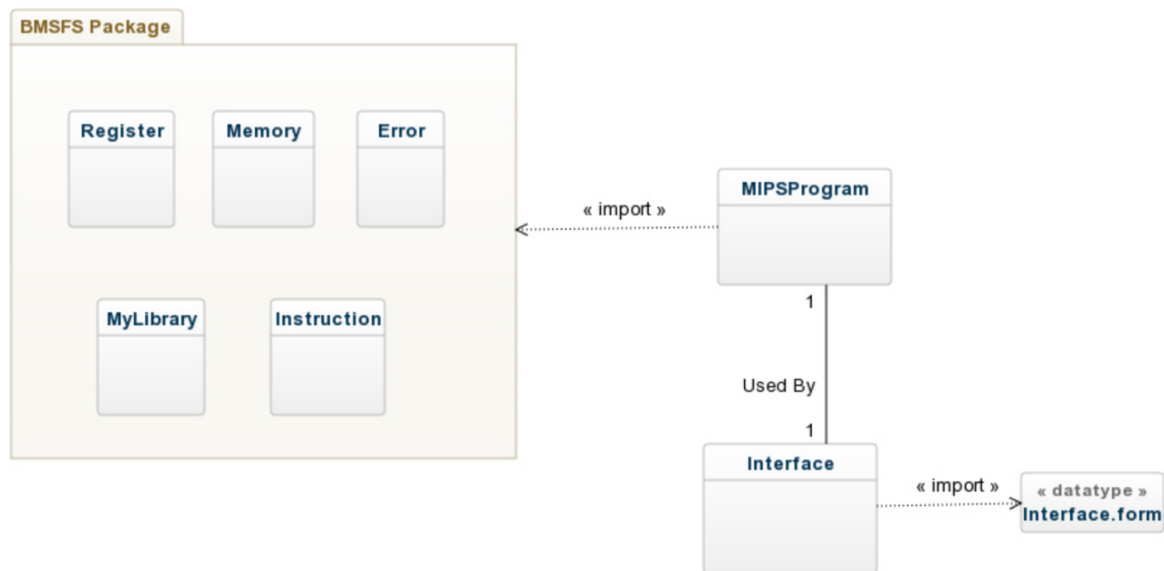
Aayush Saxena 201201021

Avijit Vajpayee 201201052

Devansh Shah 201256053

Mohit Jain 201202164

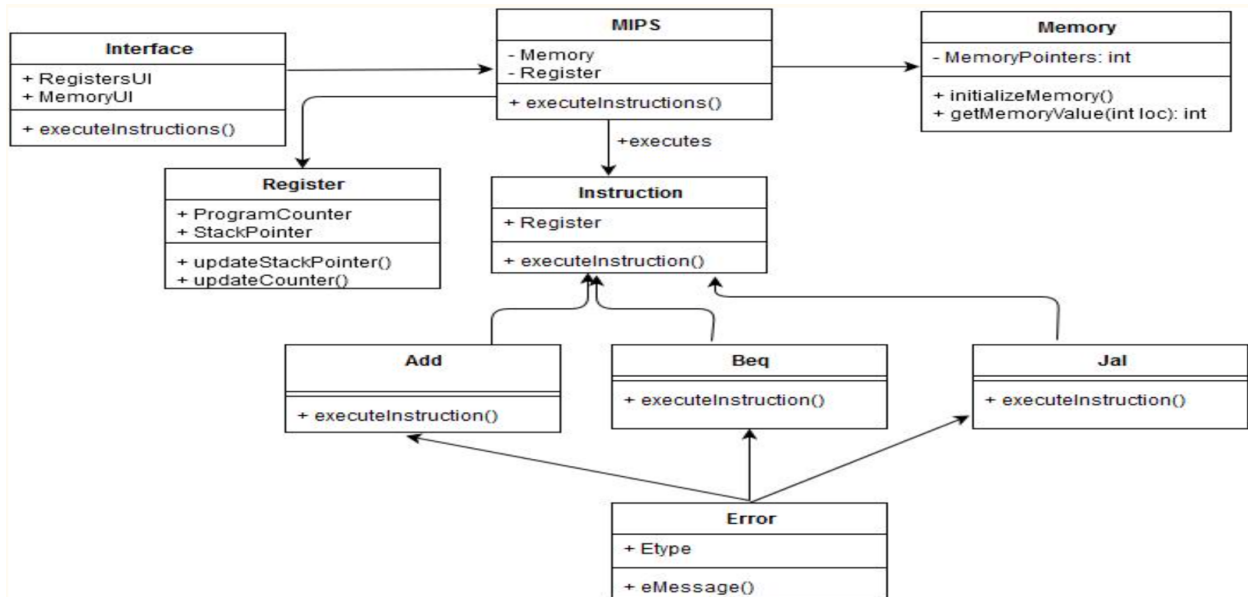
1. Original Class Diagram



Issues in Original Design -

- Cannot be extended to other instructions.
 - Possible Solution - Use of factory pattern
- Cannot be easily extended to other languages (other than MIPS).
 - Possible Solution - Use of factory pattern

2. Updated Class Diagram



3. Code Smells in original code -

BMSFS Package :

- a. **Error** - Divergent change, Switch statements, Lazy class, Shotgun surgery.
- b. **Instruction** - Conditional Complexity, Combinatorial Explosion.
- c. **Memory** - Dead code, Methods too big, Hardcode.
- d. **Register** - Conditional Complexity, No comments.
- e. **MyLibrary** - Class/Variables names, Scope too wide, Inconsistent method/argument conventions, Incomplete Library Class.

4. Progress Report -

Porting of BMSFS package - Complete

Porting of MIPSProgram - Complete

Porting of Interface and associated form - Incomplete

(This is a bulky GUI code in Java using swig and adk libraries. Possible solutions could be to -

1. Embed the java code if possible
2. Recreate the GUI in JS using not the code but the requirements as reference.