

CHAPTER 5

IMPLEMENTATON AND SOLUTION

5.1 Block Diagram:

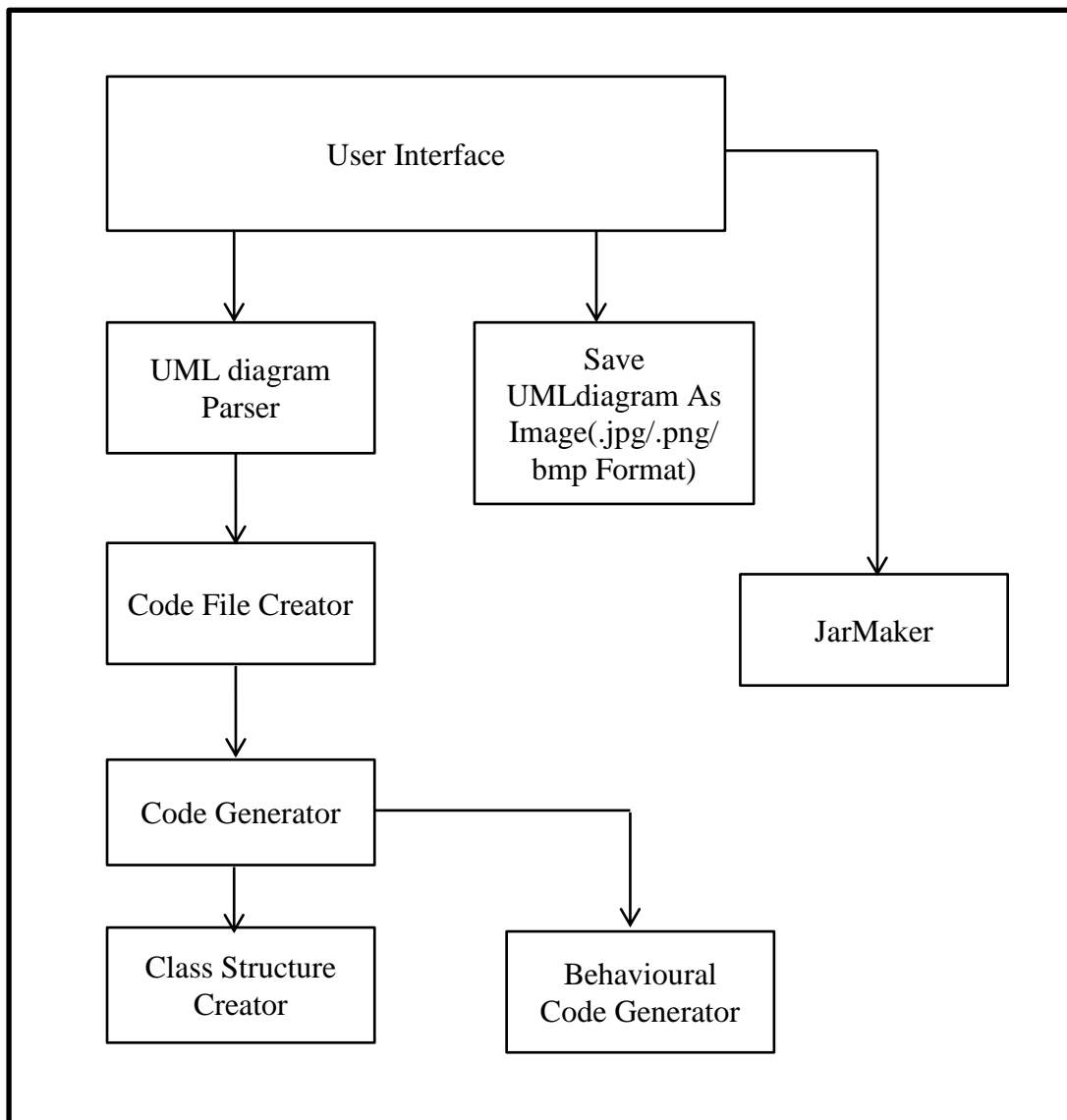


Figure 5.1: System architecture

- **User interface:**

To draw UML diagram Codraw provides interactive user interface. User can draw class and activity diagram with the help of different components and save drawn UML diagram as an image.

- **UML diagram parser:**

Class diagram are automatically transformed into structural code and Activity diagram is transformed into behavioral code.

- **Code file creator:**

File containing java code is generated at the defined location. Code obtained from activity diagram can be saved with the whole class or user can save only behavioral code depending upon user's requirement.

- **Code generator:**

Code Generator component is an important Component in our tool.UML Meta model instances are taken as an input and generates Java code. The components' explanation is as under.

a) Class Structure Creator:

Class Structure Creator component takes UML class diagram meta model instance and outputs Java structural code which contains classes, their attributes, their method signatures. It also contains interfaces and their methods. Relationships between classes are included in structural code.

b) Behavioral code generator:

Actions are defined in activity diagram. Behavioral code is generated from the activity diagram.

- **Save as Image:**

UML diagram drawn can be saved as an image depending upon user's requirement. Drawn UML diagram can be saved in different format (jpg/png/bmp).

- **JarMaker:**

JarMaker creates executable jar file of java class file on user defined location.