Model–view–controller (MVC) is an [architectural pattern](https://en.wikipedia.org/wiki/Architectural_pattern) commonly used for developing [user interfaces](https://en.wikipedia.org/wiki/User_interface) that divides an application into three interconnected parts. This is done to separate internal representations of information from the ways information is presented to and accepted from the user. The MVC design pattern decouples these major components allowing for efficient [code reuse](https://en.wikipedia.org/wiki/Code_reuse) and parallel development. Traditionally used for desktop [graphical user interfaces](https://en.wikipedia.org/wiki/Graphical_user_interface) (GUIs), this architecture has become popular for designing [web applications](https://en.wikipedia.org/wiki/Web_application) and even mobile, desktop and other clients. Popular programming languages like [Java](https://en.wikipedia.org/wiki/Java_(programming_language)), [C#](https://en.wikipedia.org/wiki/C_Sharp_(programming_language)), [Ruby](https://en.wikipedia.org/wiki/Ruby_(programming_language)), [PHP](https://en.wikipedia.org/wiki/PHP) and others have popular MVC frameworks that are currently being used in web application development straight [out of the box](https://en.wikipedia.org/wiki/Out_of_the_box_(feature)).

This simple app generally is a currency converter which converts birr to dollar and vice versa based on the selected choice of the user . This application is done using this architecture that is discussed above and it is implemented based on the following class diagram as shown below.

|  |
| --- |
| Model |
| Calculation Value |
| Birr to dollar  Dollar to birr  Get calculated value |

|  |
| --- |
| View |
|  |
| Get first number  Get calculator solution  Set Calculator solution |

|  |
| --- |
| Controller |
| The view  The model |
| Controller ( ) |

|  |
| --- |
| Birr to dollar |
| Birr  Dollar |
| Action performed |

|  |
| --- |
| Dollar to birr |
| Birr  Dollar |
| Action performed |