1 **import** javafx.application.Application;

2 **import** javafx.geometry.\*;

3 **import** javafx.scene.control.\*;

4 **import** javafx.scene.layout.\*;

5 **import** javafx.scene.text.Font;

6 **import** javafx.scene.Scene;

7 **import** javafx.stage.Stage;

8

9 **public** **class** AddingMachineV4 **extends** Application

10 {

11 Label description, plus, equals, sum, a, b;

12 TextField aValue, bValue;

13 Button compute, clear;

14

15 @Override

16 **public** **void** start(Stage primaryStage)

17 {

18 //Step 1: Declare the component objects, Step 2: Set their properties

19 description = **new** Label("Computes a + b");

20 description.setFont(new Font("Arial", 24));

21 aValue = **new** TextField();

22 aValue.setPrefSize(120, 30);

23 plus = **new** Label("+");

24 plus.setFont(new Font("Arial", 24));

25 bValue = **new** TextField();

26 bValue.setPrefSize(120, 30);

27 equals = **new** Label("=");

28 equals.setFont(new Font("Arial", 24));

29 sum = **new** Label("x,xxx.xx");

30 sum.setFont(**new** Font("Arial", 16));

31 sum.setMinWidth(68);

32 a = **new** Label("a");

33 a.setFont(**new** Font("Arial", 24));

34 b = **new** Label("b");

35 b.setFont(**new** Font("Arial", 24));

36 compute = **new** Button(" Compute ");

37 clear = **new** Button (" Clear ");

38 Tooltip.install(clear, new Tooltip("Clears operands and result"));

39

40 HBox top = **new** HBox(description);

41 top.setAlignment(Pos.CENTER);

42 HBox center = **new** HBox(10, aValue, plus, bValue, equals, sum);

43 center.setAlignment(Pos.CENTER);

44 center.setPadding(new Insets(15));

45 HBox bottom = **new** HBox(50, compute, clear);

46 bottom.setAlignment(Pos.CENTER);

47

48 BorderPane root = **new** BorderPane();

49 root.setPadding(**new** Insets(10));

50 root.setTop(top);

51 root.setCenter(center);

52 root.setBottom(bottom);

53

54 Scene scene = **new** Scene(root);

55

56 primaryStage.setTitle("BorderPane Layout Calculator");

57 primaryStage.setScene(scene);

58 primaryStage.show();

59 }

60

61 publ**i**c **static** **void** main(String[] args)

62 {

63 launch(args);

64 }

65

66 }

**Figure 11.38**

The application AddingMachineV4