How to check if a date is in the future or past in Java ME

The following code is used to check if the entered date is a future date or past date or today's date. In simple terms, this code demonstrates Time input validation. This is important in various scenarios, like when date- of Birth if given as a future date needs to requested for a correction from the user.

```
import java.util.*;
import javax.microedition.midlet.*;
import javax.microedition.lcdui.*;

public class DateDemo extends MIDlet implements ItemStateListener, CommandListener
{
  private Display display;
  private Form fmMain;
  private Command cmCheckDate;
  private Command cmReset;
  private Command cmExit;
  private DateField dfTime;
  private Date currentTime;
  private int dateOK = 0;

  public DateDemo()
  {
    display = Display.getDisplay(this);
    fmMain = new Form("Date Verifications");

    currentTime = new Date();
    dfTime = new DateField("", DateField.DATE);
    dfTime.setDate(currentTime);

    cmCheckDate = new Command("Check Date", Command.SCREEN, 1);
    cmReset = new Command("Reset", Command.SCREEN, 1);
    cmExit = new Command("Exit", Command.EXIT, 1);

    fmMain.append(dfTime);
    fmMain.addCommand(cmCheckDate);
    fmMain.addCommand(cmReset);
    fmMain.addCommand(cmExit);
    fmMain.setCommandListener(this);
    fmMain.setItemStateListener(this);
  }

  public void startApp ()
  {
    display.setCurrent(fmMain);
  }

  public void pauseApp()
  { }

  public void destroyApp(boolean unconditional)
  { }

  public void itemStateChanged(Item item)
  {
```


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```
    if (item == dfTime) {
      if (dfTime.getDate().getTime() < currentTime.getTime()){
 if(((currentTime.getTime() - dfTime.getDate().getTime()) / (1000*60*60*24) ) == 0)
   dateOK = 0;
 else dateOK = 1;
      }
      else
        dateOK = 2;
    }
  }

  public void commandAction(Command c, Displayable s)
  {
    if (c == cmCheckDate)
    {
      if (dateOK == 0)
 ShowAlertBox("Same date is selected");
      else if (dateOK == 1)
        ShowAlertBox("Past date is selected");
      else
 ShowAlertBox("Future date is selected");
    }
    else if (c == cmReset)
    {
      dfTime.setDate(currentTime = new Date());
    }
    else if (c == cmExit)
    {
      destroyApp(false);
      notifyDestroyed();
    }
  }

  public void ShowAlertBox(String msg)
  {
        Alert al = new Alert("Info", msg, null, null);
        al.setTimeout(Alert.FOREVER);
        al.setType(AlertType.INFO);
        display.setCurrent(al);
  }
}
```

Further Reading

1. Date class in J2ME
2. Calendar class in J2ME

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