
Listing 11.1

HelloWorld version 1.0

This program will greet you with a "Hello".

Features:

- may be run as either an applet or an application
- greeting name may be customized

License:

This program is licensed as shareware. You may copy and distribute the trial version of HelloWorld, but not the registered version. See the license.txt file for more details.

Install Instructions:

Run the HelloWorldSetup1_0.exe file to install the program.

Release Notes:

This is the first release of HelloWorld.

Acknowledgments:

Author: My Name

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support@mydomain.com

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Listing 11.2

```
...

<!-- copy resources into the res directory -->
<copy todir="dist/res" verbose="true">
  <fileset dir="work"
    includes="HelloWorld.exe,
              HelloWorld.html,
              HelloWorld.js,
              license.txt,
              readme.txt,
              settings.hwd,
              smiley.gif"/>
</copy>
...

<target name="Backup" depends="Date"
  description="Backup all source files into a jar">
  <jar destfile="backup/HelloWorldSrc1_0-${build.date}.jar">
    <fileset dir="src/com/mydomain/helloworld" includes="*.java"/>
    <fileset dir="" includes="build.xml"/>
    <fileset dir="work"
      includes="cardinal.ico,
                cardinal.jpg,
                HelloWorld.exe,
                HelloWorld.html,
                HelloWorld.js,
                HelloWorld.pro,
                license.txt,
                readme.txt,
```

```
settings.hwd,  
smiley.gif,  
smiley.ico,  
smiley.odg,  
smileyV.gif,  
smileyV.ico"/>
```

...

Listing 11.3

```
...  
<!-- copy resources into the res directory -->  
<copy todir="dist/res" verbose="true">  
  <fileset dir="work"  
    includes="cardinal.ico,  
              HelloWorld.exe,  
              HelloWorld.html,  
              HelloWorld.js,  
              license.txt,  
              readme.txt,  
              settings.hwd,  
              smiley.gif,  
              smiley.ico">  
</copy>  
...
```

Listing 11.5

```
...  
[Tasks]  
Name: "desktopicon"; Description: "{cm:CreateDesktopIcon}"; GroupDescription:  
"{cm:AdditionalIcons}"; (parameter was removed)  
...
```

Listing 11.6

```
...  
[Icons]  
Name: "{group}\{#MyAppName}"; Filename: "{app}\{#MyAppExeName}"; WorkingDir:  
"{app}"  
  
Name: "{group}\{cm:UninstallProgram,{#MyAppName}}"; Filename: "{uninstallexe}"  
  
Name: "{commondesktop}\{#MyAppName}"; Filename: "{app}\{#MyAppExeName}";  
WorkingDir: "{app}"; Tasks: desktopicon  
...
```

Listing 11.7

```
...  
  
[Tasks]  
Name: "desktopicon"; Description: "Create a Desktop Icon for the Application";  
GroupDescription: "{cm:AdditionalIcons}"  
  
Name: "appletdesktopicon"; Description: "Create a Desktop Icon for the Applet";  
GroupDescription: "{cm:AdditionalIcons}"  
  
...  
  
[Icons]  
...
```

```

Name: "{commondesktop}\{#MyAppName}"; Filename: "{app}\{#MyAppExeName}";
WorkingDir: "{app}"; IconFilename:
"myDirectory\dev\HelloWorld\dist\res\smiley.ico"; Tasks: desktopicon

Name: "{commondesktop}\HelloWorld Applet"; Filename: "{app}\HelloWorld.html";
IconFilename: "myDirectory\dev\HelloWorld\dist\res\smiley.ico"; WorkingDir:
"{app}"; Tasks: appletdesktopicon
...

```

Listing 11.8

```

...
[Files]
Source: "myDirectory\dev\HelloWorld\dist\res\HelloWorld.exe"; DestDir: "{app}";
Flags: ignoreversion

Source: "myDirectory\dev\HelloWorld\dist\lib\HelloWorldl_0.jar"; DestDir: "{app}";
Flags: ignoreversion

Source: "myDirectory\dev\HelloWorld\dist\lib\HelloWorldl_0.jar"; DestDir:
"{%ALLUSERSPROFILE}\MySoftware\HelloWorld\Web"; Flags: ignoreversion

Source: "myDirectory\dev\HelloWorld\dist\res\HelloWorld.html"; DestDir:
"{%ALLUSERSPROFILE}\MySoftware\HelloWorld\Web"; Flags: ignoreversion

Source: "myDirectory\dev\HelloWorld\dist\res\HelloWorld.js"; DestDir:
"{%ALLUSERSPROFILE}\MySoftware\HelloWorld\Web"; Flags: ignoreversion

Source: "myDirectory\dev\HelloWorld\dist\res\settings.hwd"; DestDir: "{app}";
Flags: ignoreversion

Source: "myDirectory\dev\HelloWorld\dist\res\settings.hwd"; DestDir:
"{%ALLUSERSPROFILE}\MySoftware\HelloWorld\Web"; Flags: ignoreversion

Source: "c:\Program Files (x86)\jh2.0\javahelp\lib\jh.jar"; DestDir: "{app}";
Flags: ignoreversion
...

[Icons]
...

Name: "{commondesktop}\HelloWorld Applet"; Filename:
"{%ALLUSERSPROFILE}\MySoftware\HelloWorld\Web\HelloWorld.html"; IconFilename:
"myDirectory\dev\HelloWorld\dist\res\smiley.ico"; WorkingDir:
"{%ALLUSERSPROFILE}\MySoftware\HelloWorld\Web"; Tasks: appletdesktopicon
...

```

Listing 11.9

```

...
public static void main(String[] args) {
    Boolean registered = false;
    String regName = "";
    String key = "";
    String iniFileName = System.getenv("ALLUSERSPROFILE")
        + "\\MySoftware\\HelloWorld\\HelloWorld.ini";
    String iniFileNameApplet = System.getenv("ALLUSERSPROFILE")
        + "\\MySoftware\\HelloWorld\\Web\\HelloWorld.ini";
    try{

```

```

...

if (isValidKey(regName, key)) {
    registered=true;
    try {
        BufferedWriter out = new BufferedWriter(
            new FileWriter(new File(iniFileName)));
        out.write(regName);
        out.newLine();
        out.write(key);
        out.close();

        out = new BufferedWriter(new FileWriter(
            new File(iniFileNameApplet)));
        out.write(regName);
        out.newLine();
        out.write(key);
        out.close();
    }
    ...

```

Listing 11.10

```

...

<target name="HelloJar"
    description="Build the HelloWorld jar file">
    <jar destfile="work/HelloWorldTemp.jar"
        basedir="bin"
        includes="com/mydomain/helloworld/*.class">
    <fileset dir="work/helpFiles" includes="*.*,
        */*.*, */**"/>
    <fileset dir="work" includes="smiley.gif"/>
    <manifest>
        <attribute name="Main-Class"
            value="com.mydomain.helloworld.HelloWorld"/>
        <attribute name="Class-Path" value="jh.jar"/>
    </manifest>
    </jar>
    <jar destfile="work/HelloWorldAppletTemp.jar"
        basedir="bin"
        includes="com/mydomain/helloworld/*.class">
    </jar>
    <echo message="HelloJar Complete"/>
</target>

...

<target name="Obfuscate"
    description="Obfuscate the jar file">
    <taskdef resource="proguard/ant/task.properties"
        classpath=
        "myDirectory/Downloads/Obfuscator/proguard4.4/lib/proguard.jar" />
    <proguard configuration="work/HelloWorld.pro"/>
    <taskdef resource="proguard/ant/task.properties"
        classpath=
        "myDirectory/Downloads/Obfuscator/proguard4.4/lib/proguard.jar" />
    <proguard configuration="work/HelloWorldApplet.pro"/>
    <echo message="Obfuscate Complete"/>
</target>

```

...

Listing 11.11

```
-injars      HelloWorldAppletTemp.jar
-outjars     ../dist/lib/HelloWorldApplet1_0.jar
-libraryjars <java.home>/lib/rt.jar
-libraryjars "c:\Program Files (x86)\jh2.0\javahelp\lib\jh.jar"
-printmapping HelloWorldAppletPro.map

-keep public class com.mydomain.helloworld.HelloWorld{
    public void init();
}
-keep public class com.mydomain.helloworld.HelloWorld{
    public static final java.lang.String COPYRIGHT;
}
```

Listing 11.12

```
function HelloWorld() {
    document.write(
        "<object classid=clsid:8AD9C840-044E-11D1-B3E9-00805F499D93");
    document.write(" width=200 height=100");
    document.write(" codebase=");
    document.write(
        "http://java.sun.com/update/1.6.0/jinstall-6u13-windows-i586.cab>");
    document.write(
        "<param name=code value=com/mydomain/helloworld/HelloWorld.class>");
    document.write(
        "<param name=archive value=HelloWorldApplet1_0.jar>");
    document.write("<param name=File value=settings.hwd>");
    document.write("<comment>");
    document.write(
        "<embed code=com/mydomain/helloworld/HelloWorld.class");
    document.write(" width=200 height=100");
    document.write(" archive=HelloWorldApplet1_0.jar");
    document.write(" type=application/x-java-applet;version=1.6");
    document.write(" pluginspage=");
    document.write(
        "http://java.sun.com/products/plugin/index.html#download");
    document.write(" File=settings.hwd");
    document.write("<noembed>");
    document.write("Unable to Load the Applet");
    document.write("</noembed>");
    document.write("</embed>");
    document.write("</comment>");
    document.write("</object>");
}
```

Listing 11.13

...

[Files]

Source: "myDirectory\dev\HelloWorld\dist\res\HelloWorld.exe"; DestDir: "{app}";
Flags: ignoreversion

Source: "myDirectory\dev\HelloWorld\dist\lib\HelloWorld1_0.jar"; DestDir: "{app}";
Flags: ignoreversion

Source: "myDirectory\dev\HelloWorld\dist\lib\HelloWorldApplet1_0.jar"; DestDir:
"%ALLUSERSPROFILE%\MySoftware\HelloWorld\Web"; Flags: ignoreversion

...

Listing 11.14

...

[Dirs]

Name: "{%ALLUSERSPROFILE}\MySoftware\HelloWorld"; Permissions: everyone-modify

...

Listing 11.15

...

[Setup]

...

ChangesAssociations=yes

...

[Registry]

Root: HKCR; Subkey: ".hwd"; ValueType: string; ValueName: ""; ValueData:
"HelloWorldFile"; Flags: uninsdeletevalue

Root: HKCR; Subkey: "HelloWorldFile"; ValueType: string; ValueName: ""; ValueData:
"HelloWorld Name File"; Flags: uninsdeletekey

Root: HKCR; Subkey: "HelloWorldFile\DefaultIcon"; ValueType: string; ValueName: "";
ValueData: "myDirectory\dev\HelloWorld\dist\res\smiley.ico"

Root: HKCR; Subkey: "HelloWorldFile\shell\open\command"; ValueType: string;
ValueName: ""; ValueData: "c:\Windows\System32\javaw -jar
""{app}\HelloWorldl_0.jar"" "%1"" "

...

Listing 11.16

...

[Code]

```
function GetInstallDateTime (s : String) : String;
begin
  Result := GetDateTimeString('yyyy/mm/dd hh:nn:ss', '-', ':');
end;
```

Listing 11.17

...

[Setup]

...

ChangesAssociations=yes

PrivilegesRequired=admin

...

[Registry]

...

Root: HKCR; Subkey: "HelloWorldFile\shell\open\command"; ValueType: string;
ValueName: ""; ValueData: "c:\Windows\System32\javaw -jar
""{app}\HelloWorldl_0.jar"" "%1"" "

Root: HKLM; Subkey: "SOFTWARE\JavaSoft\Prefs\com\mydomain\helloworld\date";
ValueType: string; ValueName: ""; ValueData: {code:GetInstallDateTime|''}; Flags:

```
createvalueifdoesntexist
```

```
...
```

Listing 11.18

```
...
```

[Code]

```
...
```

```
/** Getting Java version from registry */  
function getJavaVersion(): String;  
var  
    javaVersion: String;  
begin  
    javaVersion := '';  
    RegQueryStringValue(HKLM,  
        'SOFTWARE\JavaSoft\Java Runtime Environment', 'CurrentVersion',  
        javaVersion);  
    GetVersionNumbersString(javaVersion, javaVersion);  
    Result := javaVersion;  
end;
```

Listing 11.19

```
...
```

[Code]

```
...
```

```
/** Will only install if correct JRE */  
function InitializeSetup(): Boolean;  
begin  
    Result := true;  
    if Length( getJavaVersion() ) = 0 then begin  
        /** No Java detected */  
        MsgBox('Setup detected that there is no Java ' +  
            'Runtime installed. Cannot install.',  
            mbInformation, MB_OK);  
        Result := false;  
    end  
    else begin  
        /** Java version lower than 1.6.0 detected */  
        if (getJavaVersion()) < '1.6' then begin  
            MsgBox('Setup detected that you have not ' +  
                'installed at least Java Runtime 1.6.0. ' +  
                'Cannot Install',  
                mbInformation, MB_OK);  
            Result := false  
        end  
    end  
end;  
end;
```

Listing 11.20

```
...
```

[Setup]

```
...
```

```
OutputBaseFilename=HelloWorldJRESetup1_0
```

```
...
```

Listing 11.21

```
...
[Files]
...

Source: "myDirectory\dev\HelloWorld\res\settings.hwd"; DestDir: "{app}"; Flags:
ignoreversion

Source: "myDirectory\dev\HelloWorld\res\HelloWorld.hwd"; DestDir:
"%{ALLUSERSPROFILE}\MySoftware\HelloWorld\Web"; Flags: ignoreversion

Source: "c:\Program Files (x86)\jh2.0\javahelp\lib\jh.jar"; DestDir: "{app}";
Flags: ignoreversion

; Java JRE Installation Files(will be deleted after the installation)
; this next line is the only needed if want the option of including
; the JRE in the setup!!

Source: "myDirectory\Downloads\Java\jre-6u17-windows-i586.exe"; DestDir: "{app}";
Check: InstallJRESelected; Flags: ignoreversion deleteafterinstall

; NOTE: Don't use "Flags: ignoreversion" on any shared system files

...
```

Listing 11.22

```
...
[Run]
; run only if install JRE has been selected

FileName: "{app}\jre-6u17-windows-i586.exe"; WorkingDir: "{app}"; Check:
InstallJRESelected;

Filename: "{app}\{#MyAppExeName}"; Description: "{cm:LaunchProgram,{#MyAppName}}";
Flags: nowait postinstall skipifsilent

...
```

Listing 11.23

```
...
[Code]
/* Getting Java version from registry */
function getJavaVersion(): String;
var
  javaVersion: String;
begin
  javaVersion := '';
  RegQueryStringValue(HKLM,
    'SOFTWARE\JavaSoft\Java Runtime Environment', 'CurrentVersion',
    javaVersion);
  GetVersionNumbersString(javaVersion, javaVersion);
  Result := javaVersion;
end;

(Comment was removed from here)
function isValidJRE(): Boolean;
begin
  Result := true;
```



```

if Length( getJavaVersion() ) = 0 then begin
    /* No Java detected */

    (Code to display a message box was removed from here)

    Result := false;
end
else begin
    /* Java version lower than 1.4.0 detected */
    if (getJavaVersion()) < '1.4' then begin

        (Code to display a message box was removed from here)

        Result := false
    end
end;
end;

```

Listing 11.24

```

...
[Code]
...

var
    JavaInstallPage: TinputOptionWizardPage;

procedure InitializeWizard;
begin
    /* Create the new page */

    JavaInstallPage := CreateInputOptionPage(wpWelcome,
        'Java is Required',
        'You do not have the minimum version of Java Runtime installed.',
        'Do you want to install JRE 6.17?',
        False, False);

    JavaInstallPage.Add('Install JRE 6.17:');

    if (isValidJRE) then begin
        JavaInstallPage.Values[0] := False;
    end
    else begin
        JavaInstallPage.Values[0] := True;
    end;

end;

```

Listing 11.25

```

...
[Code]
...

function ShouldSkipPage(PageID: Integer): Boolean;
begin
    /* Skip pages that shouldn't be shown */
    if (PageID = JavaInstallPage.ID) and (isValidJRE) then
        Result := True
    else
        Result := False;
end;

```

```
end;
```

Listing 11.26

```
...
[Code]
...

function InstallJRESelected(): Boolean;
begin
    Result := (JavaInstallPage.Values[0]);
end;
```

Listing 11.27

```
cd c:\Program Files (x86)\Inno Setup 5
Compil32.exe /cc "myDirectory\dev\HelloWorld\HelloWorld1_0.iss"
Compil32.exe /cc "myDirectory\dev\HelloWorld\HelloWorldJRE1_0.iss"
```

Listing 11.28

```
[Setup]
...
AppCopyright=© Copyright My Company 2010
UsePreviousAppDir=yes
...
```

Listing 11.29

```
...

<target name="Backup" depends="Date"
    description="Backup all source files into a jar">
    <jar destfile="backup/HelloWorldSrc1_0-${build.date}.jar">
        <fileset dir="src/com/mydomain/helloworld" includes="*.java"/>
        <fileset dir="" includes="build.xml,
            HelloWorld1_0.iss,
            HelloWorldJRE1_0.iss,
            Setups1_0.bat"/>
        <fileset dir="work" includes="cardinal.ico,
            cardinal.jpg,
            HelloWorld.exe,
            HelloWorld.html,
            HelloWorld.js,
            HelloWorld*.pro,
            license.txt,
            readme.txt,
            settings.hwd,
            smiley.gif,
            smiley.ico,
            smiley.odg,
            smileyV.gif,
            smileyV.ico"/>
        <fileset dir="work/helpFiles" includes="*.*, */*.*, */*/"/>
    </jar>
    <echo message="Backup Complete"/>
    ...
```
