

# Run JavaAgent/Send Email

## JavaBean/JavaAgent/Xpages

### Sistèm Kondisyon:

Download Domino Designer 8.5.2 Environment (DDE)

<http://www.ibm.com/developerworks/downloads/ls/dominodesigner/>

### Entrodiksyon:

Bati yon tès Java pwogram ki soumèt mesaj dbug done nan konsòle, kouri yon JavaAgent ki voye yon imèl nan bwat resepsyon itilizatè ak URL nan dokiman espesifik (yo).

**Limit responsabiltè nou:** A enfòmasyon ki nan sa ki annapre yo prezante kòm se. Sa a lesòn patikilye pansé ké ou genyen konesans debaz pwogram. Tout tutoriyèl yo baze sou yon lojisyèl sexclips / sexclips ki baze sou. Si w ta bezwen pran abitid familiarize w avèk anviwònman ou, anvan yo kontinye lesòn patikilye sa a, tanpri, sispann kounye a epi yo wè lojisyèl nou an / Frameworks paj wèb ...

### Java Pwogram Enfòmasyon

Nan pwen sa a nou sipoze domino Designer 8.5.2 ap telechaje / enstale. Kòd yo bay anba a, ak domèn ki enterese yo te make ou pou konfò ou.

## Step 1:

### Bati yon katab Sous pou Java Pwogram:

Premye etap la konvèti pi wo kòd Xpages yo kominike avèk Java se bati yon katab Sous nan kay klas Java. Ou yo pral sèvi ak yon JavaBean kòm paj datasours, tanpri swiv etap sa yo anba a konplete kreyasyon an katab Sous

1. Go to DDE's Project Explorer
2. Expand the project folder, where necessary
3. Right-click on 'Local' folder
4. Go to New, then Other
5. Expand Java, go to Source Folder (Figure 1)
6. Click Next, then type 'WebContent/WEB-INF/Source' in folder name
7. Click Finish

## Step 2:

### Bati yon katab pake pou Java Pwogram:

Dezyèm etap nan konvèti pi wo kòd Xpages yo kominike avèk Java se bati yon katab pake nan kay klas Java. Ou yo pral sèvi ak yon JavaBean kòm paj datasours, tanpri swiv etap sa yo anba a konplete kreyasyon an katab pake

1. Go to DDE's Source folder newly created
2. Right-click on 'WebContent/WEB-INF/Source' folder
3. Go to New, then Other
4. Expand Java, go to Package folder (Figure 2)

5. Click Next, then type 'com.dokoll.solutions.inc.javabeans' in name
6. Click Finish

## Step 3:

### Bati yon klas Java:

Etap la twazyèm konvèti pi wo kòd Xpages yo kominike avèk Java se bati yon katab pake nan kay klas Java. Ou yo pral sèvi ak yon JavaBean kòm paj datasours, tanpri swiv etap sa yo anba a konplete kreyasyon an Gwoup

1. Go to DDE's Package folder newly created
2. Right-click on 'com.dokoll.solutions.inc.javabeans' package
3. Go to New, then Other
4. Expand Java, go to Classes
5. Click Next, then type 'SiteFinderBean' in name (Figure 3)
6. Click Finish

\*Kopyé epi kole anba a kòd nan plas la nan kòd la ki jenere nan SiteFinderBean.java klas la ...

```
package com.dokoll.solutions.inc.javabeans;

/**
 * Created: 2011.07.09.10.16.PM
 * SiteFinderBean class to submit to Site form
 */

import javax.faces.context.FacesContext;
import lotus.domino.NotesException;
import lotus.domino.local.Database;
import lotus.domino.local.Document;

/**
 * @author Dököll Solutions, Inc.
 * @version 2011.07.09.10.16.PM
 */
public class SiteFinderBean {

    // declare variables
    private String SiteName = "SiteName is SiteName";
    private String SiteNumber = "SiteNumber is SiteNumber";
    private String Phone = "Phone is Phone";
    private String SiteType = "SiteType is SiteType";
    private String StreetAddress = "StreetAddress is StreetAddress";
    private String City = "City is City";
    private String State = "State is State";
    private String Country = "Country is Country";
    private String Amenities = "Amenities is Amenities";
    private String Hours = "Hours is Hours";
    private String Directions = "Directions is Directions";
    private String SearchCity = "SearchCity is SearchCity";
    private String SearchState = "SearchState is SearchState";
    private String SearchZip = "SeachZip is SeachZip";
```

```
/**
 * @return the siteName
 */
public String getSiteName() {
    return SiteName;
}

/**
 * @param siteName
 * the siteName to set
 */
public void setSiteName(String siteName) {
    SiteName = siteName;
}

/**
 * @return the siteNumber
 */
public String getSiteNumber() {
    return SiteNumber;
}

/**
 * @param siteNumber
 * the siteNumber to set
 */
public void setSiteNumber(String siteNumber) {
    SiteNumber = siteNumber;
}

/**
 * @return the phone
 */
public String getPhone() {
    return Phone;
}

/**
 * @param phone
 * the phone to set
 */
public void setPhone(String phone) {
    Phone = phone;
}

/**
 * @return the siteType
 */
public String getSiteType() {
    return SiteType;
}

/**
 * @param siteType
 * the siteType to set
 */
public void setSiteType(String siteType) {
    SiteType = siteType;
}
```

```
}

/**
 * @return the streetAddress
 */
public String getStreetAddress() {
    return StreetAddress;
}

/**
 * @param streetAddress
 * the streetAddress to set
 */
public void setStreetAddress(String streetAddress) {
    StreetAddress = streetAddress;
}

/**
 * @return the city
 */
public String getCity() {
    return City;
}

/**
 * @param city
 * the city to set
 */
public void setCity(String city) {
    City = city;
}

/**
 * @return the state
 */
public String getState() {
    return State;
}

/**
 * @param state
 * the state to set
 */
public void setState(String state) {
    State = state;
}

/**
 * @return the country
 */
public String getCountry() {
    return Country;
}

/**
 * @param country
 * the country to set
 */
```

```
public void setCountry(String country) {
Country = country;
}

/**
 * @return the amenities
 */
public String getAmenities() {
return Amenities;
}

/**
 * @param amenities
 * the amenities to set
 */
public void setAmenities(String amenities) {
Amenities = amenities;
}

/**
 * @return the hours
 */
public String getHours() {
return Hours;
}

/**
 * @param hours
 * the hours to set
 */
public void setHours(String hours) {
Hours = hours;
}

/**
 * @return the directions
 */
public String getDirections() {
return Directions;
}

/**
 * @param directions
 * the directions to set
 */
public void setDirections(String directions) {
Directions = directions;
}

/**
 * @return the searchCity
 */
public String getSearchCity() {
return SearchCity;
}

/**
 * @param searchCity
```

```

* the searchCity to set
*/
public void setSearchCity(String searchCity) {
SearchCity = searchCity;
}

/**
* @return the searchState
*/
public String getSearchState() {
return SearchState;
}

/**
* @param searchState
* the searchState to set
*/
public void setSearchState(String searchState) {
SearchState = searchState;
}

/**
* @return the searchZip
*/
public String getSearchZip() {
return SearchZip;
}

/**
* @param searchZip
* the searchZip to set
*/
public void setSearchZip(String searchZip) {
SearchZip = searchZip;
}

public void submitEntry() {

// let's add a try catch here
System.out.println("Entering Try catch Block...");

try {

// get the current database being used
Database database = (Database) FacesContext.getCurrentInstance()
.getApplication().getVariableResolver().resolveVariable(
FacesContext.getCurrentInstance(), "database");
System.out.println("Database obtained.." + database);

// instantiate the document create call
Document submitDocument = (Document) database.createDocument();
System.out.println("Document submit initialized..." + submitDocument);
// submit using Instructions form
submitDocument.appendChildValue("form", "Site");
// using appendItemValue to insert in the fields needed
// notice we are referencing the field on the xpage, and the
// JavaBean variables

```

```

submitDocument.appendItemValue("siteName", SiteName);
submitDocument.appendItemValue("siteNumber", SiteNumber);
submitDocument.appendItemValue("phone", Phone);
submitDocument.appendItemValue("siteType", SiteType);
submitDocument.appendItemValue("streetAddress", StreetAddress);
submitDocument.appendItemValue("city", City);
submitDocument.appendItemValue("state", State);
submitDocument.appendItemValue("country", Country);
submitDocument.appendItemValue("amenities", Amenities);
submitDocument.appendItemValue("hours", Hours);
submitDocument.appendItemValue("directions", Directions);
submitDocument.appendItemValue("searchCity", SearchCity);
submitDocument.appendItemValue("searchState", SearchState);
submitDocument.appendItemValue("searchZip", SearchZip);

// Run the agent after all items have been submitted to page
database.getAgent("SendRichTextWithURLJavaAgent").runOnServer();
System.out.println("Message to Console..." + submitDocument);
// saves the data, based on above fields to Instructions form
submitDocument.save();
submitDocument.recycle();
System.out.println("Program ended...");
// throwable initialized if there is an error, either in the field
// or the query
} catch (NotesException e) {
// print this error to the server
e.printStackTrace();
}

}

}

```

\*Ou te ekri egzamen Java pwogram ki chita pale nan yon JavaAgent ... Kounye a kite a ekri ajan an Ajan ... Si ou yo abitye avèk JavaAgents, ou ta dwe gen yon kòd kilè eskèlèt te ajoute pa default yon fwa ke yon dosye nouvo yo te kreye. Efase epi ranplase ak anba a ...

## Step 4:

### Bati yon JavaAgent voye imel:

Domèn ki enterese yo te make ou pou konfò ou nan ki anba a JavaAgent, kite a ale nan mouvman an nan fè tès sa a ti gason mal. Tanpri, double-tcheke asire w gen etap sa yo te pran plas:

1. Go to DDE's Database Navigator to your upper left
2. Double-click Code, then Agents
3. Double-click your New JavaAgent from list in middle screen
4. Go to Properties Tab below the Agent code, within Basics section
5. Scroll Down to Runtime (Trigger), select On Event option
6. Choose 'Action Menu selection' from the dropdown
7. Scroll further to Target, choose 'All Documents in database' from dropdown
8. Go to Security section, choose Run as Web User
9. Select option 'Allow Restricted Operations' under Runtime Security level

10. Save the JavaAgent, then run it

- Right-click on your project through Database Navigator
- Notes Client Opens your Database
- Minimize your Notes Client window
- Go to Tools in the Client's Menu bar
- Choose ' Show Java Debug Console'
- Console loads, drag it aside your minimized Client screen
- Go to Actions in the Menu bar, find your Agent name
- Selecting the JavaAgent from the list will run it
- Java Debug Console window produces the results

```
/**
 * Created from Copy: 2011.07.08.10.50.AM
 * JavaAgent being converted to add RichText to email with URL info
 * This Agent "SendRichTextWithURLJavaAgent" is run through JavaBean
 */

import lotus.domino.*;

/**
 * @author kcherizard
 * @version 2010.12.15.3.53.PM
 */

public class JavaAgent extends AgentBase {

    // declare variables, and add static values as test
    Session session;
    AgentContext agentContext;
    Database database;
    Document MemoDoc;
    Document TempDoc;
    final String LNK_START = "http://localhost/Docu.nsf/";

    // TO TO: Delete if not needed, this a test data
    String dashboards = new String("Dashboards Posting");

    // Xpage should also run this as a Javabean using this method
    // Load to Submit button in the specific Xpage
    public void NotesMain() {
        try {
            // get a session, current user logged on
            session = getSession();
            System.out.println("Session Obtained..." + session);
            // get the Agent in question
            agentContext = session.getAgentContext();
            System.out.println("AgentContext Obtained..." + agentContext);
            // load coordinates of current AgentContext, plug database Agent runs on
            database = agentContext.getCurrentDatabase();
            System.out.println("DB Obtained..." + database);

            // Indicate the view in which you want to find the
            // important document that should not be overlooked.
            View view = database.getView("SiteListings");
```



```

System.out.println("View Obtained..." + view);

// The collection is based off the key value that indicates an
// important document.
ViewEntryCollection vec = view.getAllEntries();
System.out.println("Collection Obtained..." + vec);
//ViewEntry tmpentry;
//ViewEntry entry = vec.getFirstEntry();

//Get first Document from current view
MemoDoc = ((ViewEntryCollection)
vec).getFirstEntry().getDocument();
System.out.println("Document Obtained..." + MemoDoc);

if (vec.getCount() > 0) {

// create a new document
MemoDoc = database.createDocument();
// use Mail form to send mail
MemoDoc.replaceItemValue("Form", "Memo");
RichTextItem body = MemoDoc.createRichTextItem("Body");
body.appendText("You have been summoned to building an App
to help your community:");
body.addNewLine();
body.addNewLine(2);
body.appendDocLink(database, database.getTitle(), "Go to
actual database via the following");
body.addNewLine();
String URL = LNK_START + view + "/" +
vec.getFirstEntry().getUniversalID() + "?OpenDocument";
body.addNewLine();
body.appendText(URL);
System.out.println("Body Obtained..." + body);
System.out.println("URL Obtained..." + URL);
// add a meaningful subject
// for now just use SendTo
MemoDoc.replaceItemValue("Subject", "New Submitted"
+ " " + dashboards);
MemoDoc.replaceItemValue("SendTo",
"YourEmailAddress@You.org");
MemoDoc.replaceItemValue("Categories", "View Data");
MemoDoc
.replaceItemValue(
"Body",
body.getValueString());
//Get first doc
TempDoc = ((ViewEntryCollection)
vec).getNextEntry().getDocument();
// tell Notes to save the sent message
MemoDoc.setSaveMessageOnSend(true);
boolean suc = MemoDoc.computeWithForm(true, false);
// send the email
MemoDoc.send();
// close all coordinates, finish/clean entry

```

```

MemoDoc.recycle();
// memo=null;
MemoDoc = TempDoc;

// }
// catch if Xpage does not have any values
if (MemoDoc != null)
MemoDoc.recycle();
if (database != null)
database.recycle();
if (agentContext != null)
agentContext.recycle();
if (session != null)
session.recycle();
// print out a message to console
System.out.println("Dashboards JavaAgent ended... ");
}

} catch (NotesException ne) {

ne.printStackTrace();

} catch (Exception e) {
e.printStackTrace();

}

}

}

```

\*How does one fire such an Agent through Xpages, you ask! Well set your eyes on this...

## Step 5:

### Bati yon Xpages fòmè kouri JavaBean / JavaAgent:

Domèn ki enterese yo te make ou pou konfò ou nan ki anba a JavaAgent, kite a ale nan mouvman an nan fè tè sà a ti gason mal. Tanpri, double-tcheke asire w gen etap sa yo te pran plas:

- 11.Go to DDE's Database Navigator to your upper left
- 12.Double-click XPages, then New XPage
- 13.Name your Xpage, we recommend adding a description
- 14.Submit then delete the generated code
- 15.Copy and and paste entire code below in your new Xpage.

```

<?xml version="1.0" encoding="UTF-8"?>
<xp:view xmlns:xp="http://www.ibm.com/xsp/core">

```

```

<xp:table align="left"
style="font-weight:bold;margin-left:0px;width:546.0px" border="0"
id="table1">

<xp:tr>
<xp:td>

Submit and Send email
<xp:br></xp:br><xp:br></xp:br>
<xp:button value="Submit"
id="button1">
<xp:eventHandler event="onclick"
submit="true" refreshMode="complete" immediate="false"
save="true" id="eventHandler1">
<xp:this.action>

<[CDATA[#{javascript:SiteFinderBean.submitEntry()}]]></xp:
this.action>
</xp:eventHandler>
</xp:button>

</xp:td>

</xp:tr>
</xp:table></xp:view>

```

\*Kouri nan Kliyan oswa Navigatè, Klike sou bouton, alò tcheke konsole JavaAgent ak imel ou Inbox

### Console results:

```

Program Started...
Entering Try catch...
Session Obtained...CN=DispicableHouse/O=DispicableHouse
DB Obtained...c:\Program Files (x86)\IBM\Lotus\Notes\Data\Docu.nsf
View Obtained...SiteListings
Collection Obtained...lotus.domino.local.ViewEntryCollection@4d034d03
Document Obtained...5144F2377CBF2EDA852578C7005A2D59
Body Obtained...Body
URL
Obtained...http://localhost/Docu.nsf/SiteListings/5144F2377CBF2EDA852578C7005A2D59?
OpenDocument
Dashboards JavaAgent ended...

```

## TIP:

Yon JavaAgent konsilte atravè non an li te kreye anba pa kòm 'JavaAgent' File klas la vrè. Si w bezwen èd lè n ap kalkile konnen kisa ou rele ke ajan, fè etap 1-2, gade moute dat yo nan dènye kolòn Denye modifye soti nan fenèt la lis Ajan an nan mitan ekran an. JavaAgent ou ta dwe youn nan dènye te kreye. Ou fè jwenn non an nan JavaAgent ou.

Figure 1

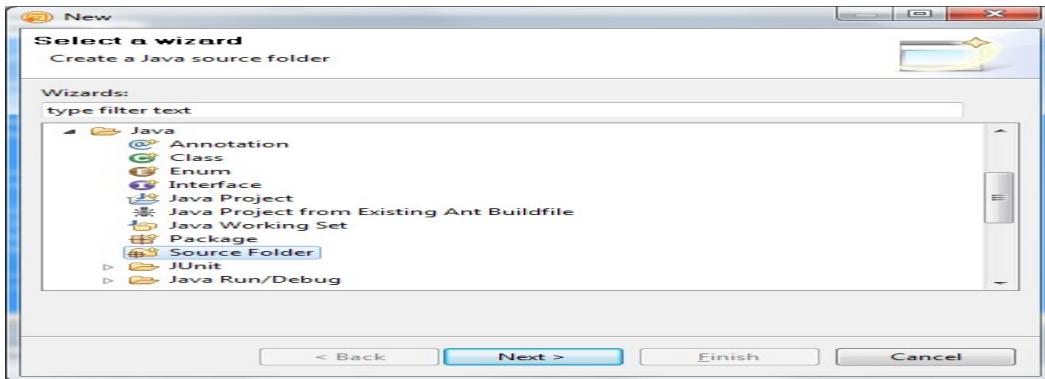


Figure 2

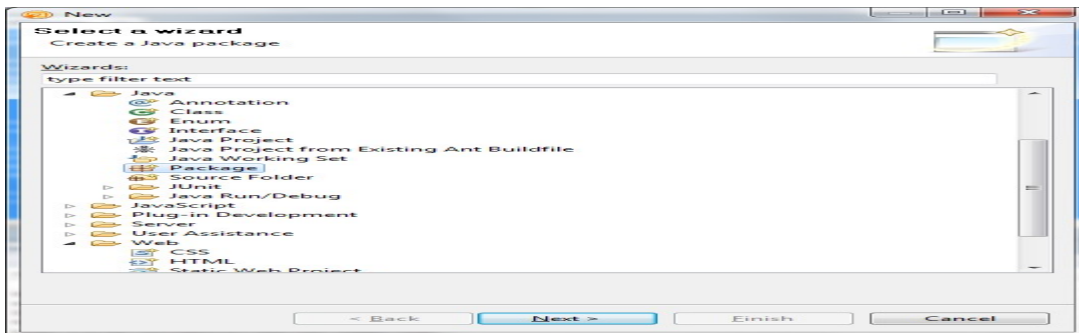
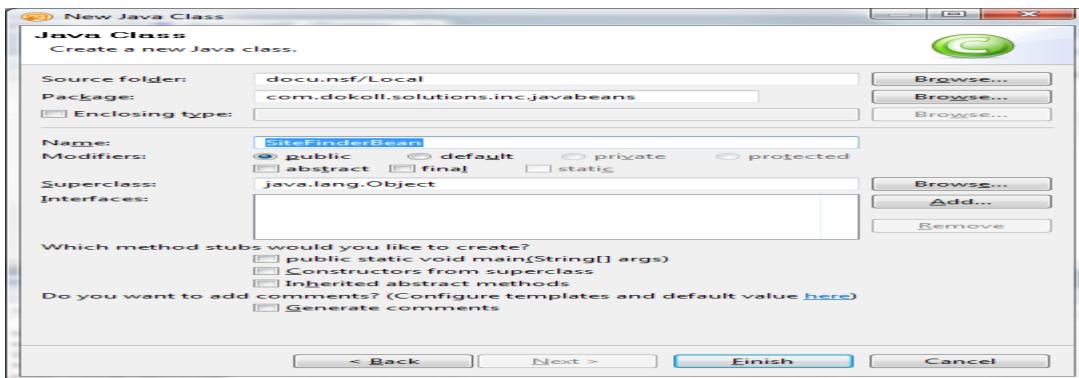
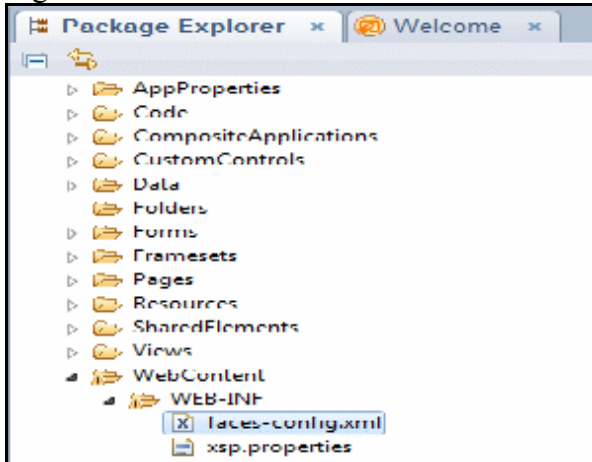


Figure 3



Continued...

Figure 4



**Konklizyon:**

Nou rekòmande ekri yon klas separe JavaBean kenbe varyab klas ou, Lè sa a, ekri yon pwa fè bak fè travay la jan nou koumanse, yo soumèt yo ak sou sa ...

**Hint:** Sa a kapab atik dwe lye ak yon pwojè JavaAgent ki ekziste yo, soumèt nan yon dosye XML. Done ki sòti nan sa a JavaBean ka itilize yo ki Ajan bati dosye a XML. Go to lyen JavaAgent, eseye li!

Kesyon, kòmantè, tanpri poste yon mesaj tou kout sou fòm nou yo. Mèsi pou vini ...