

Institut Supérieur d'Informatique et de Mathématique en Monastir

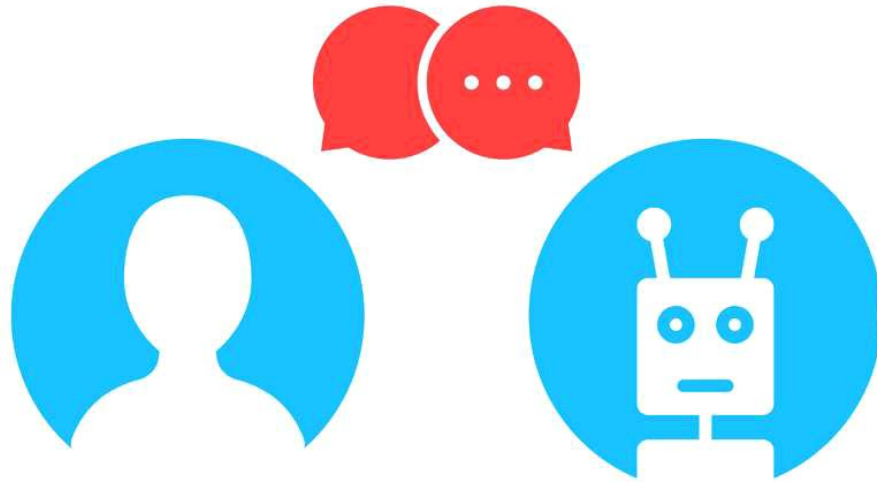


ISIMM

Filière :Licence Appliquee en informatique
Specialité:Systeme informatique et Logiciel

Cahier de Charge : Conception et Réalisation
d'un ChatBot

BANP *BETA*



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1.Description du Projet

1.1.Définition chatBot

Afin d'établir une conversation entre homme et machine, une conversation homme-machine en langage naturel est utilisée, c'est cela que l'on appelle communément un chatBot ou agent conversationnel . Un programme informatique écrit en langage quelconque répond instantanément, en se basant sur un corpus (ensemble de question/ réponse) .

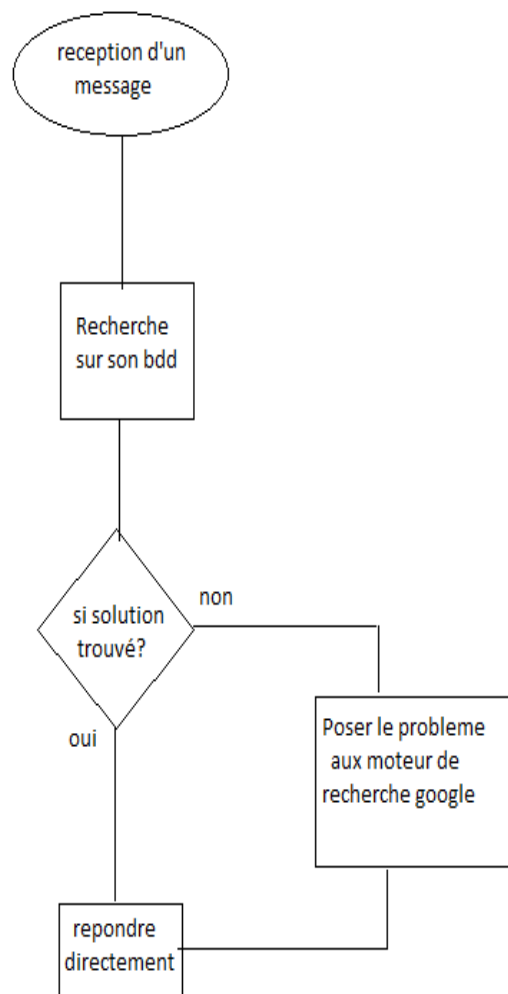
1.2.Description textuelle du sujet

Un chatbot est un robot logiciel pouvant dialoguer avec un individu ou consommateur par le biais d'un service de conversations automatisées effectuées en grande partie en langage naturel. Le chatbot utilise à l'origine des bibliothèques de questions et réponses L'objectifs majeur de notre application "BANP beta" c'est de crée un chatbot de niveau 1 avec une intérface graphique et une simple base de données.

2.Conception

2.1.Base de Donnees

Figure :Organigramme systeme actuel



Structure du base de donnees :

```
SQL> desc utilisateur
```

Name	Null?	Type
USER_NAME	NOT NULL	VARCHAR2(20)
MOTPASSE		VARCHAR2(20)
NOM		VARCHAR2(25)
PRENOM		VARCHAR2(25)
DATE_NAISS		VARCHAR2(12)
SEXE		VARCHAR2(10)

```
SQL> desc question
```

Name	Null?	Type
QUTNUM	NOT NULL	NUMBER
QUT		VARCHAR2(300)
REPONSE		VARCHAR2(300)

3. Réalisation

3.1. Environnement de travail:

3.1.1. Environnement matériel:

Nous avons élaboré ce travail sur un PC dont la configuration est la suivante :

- Pc portable : Asus: - RAM: 8.00 GO
- Disque dur : 1 TO
- Microprocesseur : intel® core™ i7

3.1.2. Environnement logiciel:

L'environnement logiciel employé s'illustre en :

- Un Système d'exploitation Windows 10 64 bits.

- NetBeans comme environnement de développement JAVA, sur lequel on a installé le JDK 1.8.
- SGBD: Oracle

3.1.3. Délais de réalisation de l'application

- un mois

3. Interface:

DES L'OUVERTURE DE L'APPLICATION:

1ERE INTERFACE:

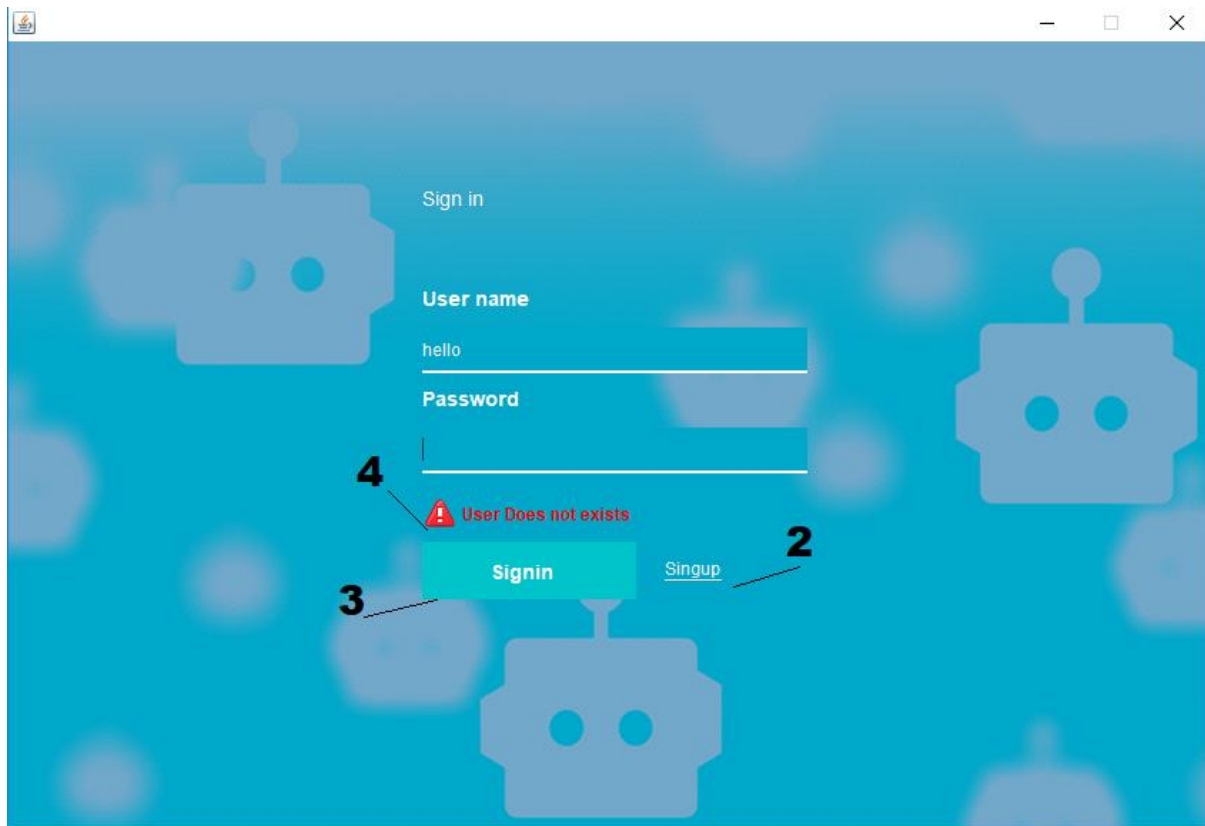
L'interface principal de l'application :



le code:

```
private void jLabel3MouseClicked(java.awt.event.MouseEvent evt) {  
    // TODO add your handling code here:  
    Home4 lgf = new Home4();  
    lgf.setVisible(true);  
    lgf.pack();  
    lgf.setLocationRelativeTo(null);  
    lgf.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
    this.dispose();  
}  
  
private void jLabel4MouseClicked(java.awt.event.MouseEvent evt) {  
    // TODO add your handling code here:  
    Signin lgf = new Signin();  
    lgf.setVisible(true);  
    lgf.pack();  
    lgf.setLocationRelativeTo(null);  
    lgf.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
    this.dispose();  
}  
  
/**
```

le clique sur le bouton (1) ouvre l'interface suivant qui permet le connexion de l'utilisateur



le clique sur le bouton (2) ouvre l'interface suivant qui permet l'inscryption d'un nouveau utilisateur:

The image shows a web browser window with a registration form titled "SING UP". The form is set against a blue background with a faint robot pattern. It contains several input fields: "User name" (containing "User1"), "First name" (containing "benoun"), "Last name" (empty), "Password" (masked with dots), "Birth date" (containing "Apr 4, 2018"), and "Sexe" (with radio buttons for "Male" and "Female", where "Female" is selected). A green "Signup" button is at the bottom center. A red error message "Fill in all required fields" with a warning icon is located to the right of the button. Two annotations are present: a black number "3" with a line pointing to the "Signup" button, and a black number "4" with a line pointing to the error message.

SING UP

User name
User1

First name
benoun

Last name

Password
.....

Birth date
Apr 4, 2018

Sexe
☐ Male ☒ Female

Signup

Fill in all required fields

3

4

(4)les controles :

-l'utilisateur doit remplir tous les champs (A4):

-controle l'existence d'utilisateur au base de donnees (A4):

```

String name=jTextField1.getText();
String pass=String.valueOf(jPasswordField1.getText());
if( name.equals("") || pass.equals("")){
    jLabel2.setText("Fill in all required fields ");
    jLabel2.setVisible(true);

}else{
    jLabel2.setText("User Does not exists ");
    jLabel2.setVisible(true);
}

conn.close();
} catch (SQLException e) {

```

B4

A4

-Utilisation de nouveau bibliothèque :jcalendar.jar (C1)

SIGN UP

User name
User1

Password
.....

Birth date
Apr 4, 2018

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
14	1	2	3	4	5	6	7
15	8	9	10	11	12	13	14
16	15	16	17	18	19	20	21
17	22	23	24	25	26	27	28
18	29	30					

First name
benoun

Last name

Sexe
☐ Male
 ☒ Female

Signup
⚠ Fill in all required fields

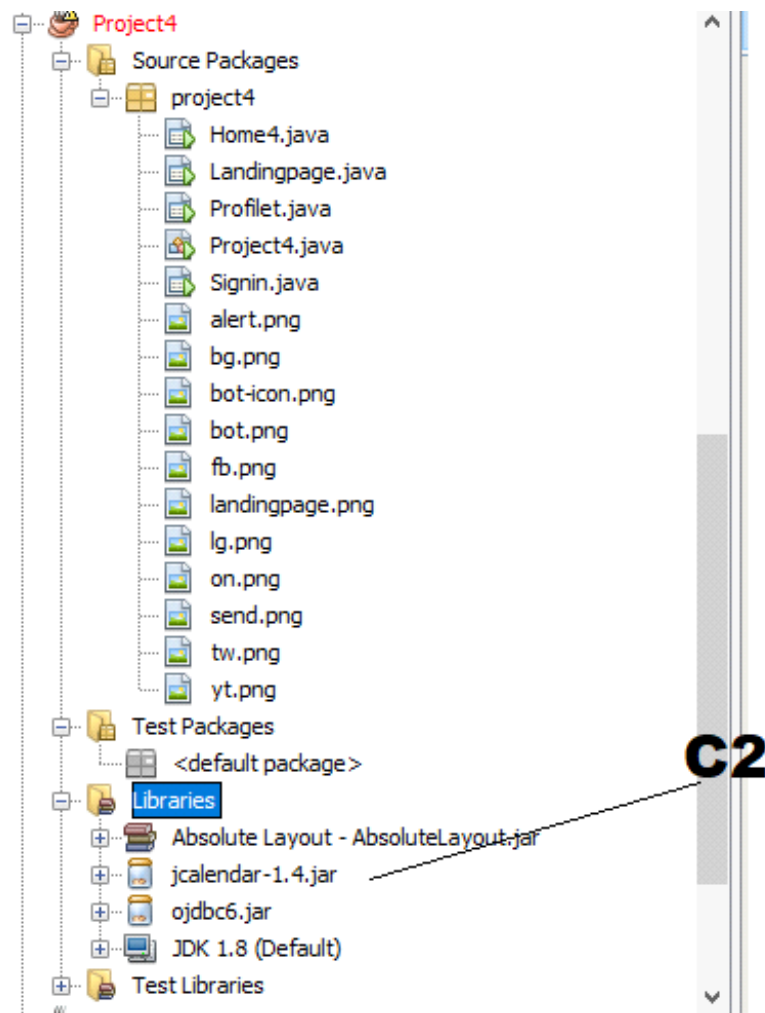
C1

C2:l'ensemble des bibliotheques ajoutés:

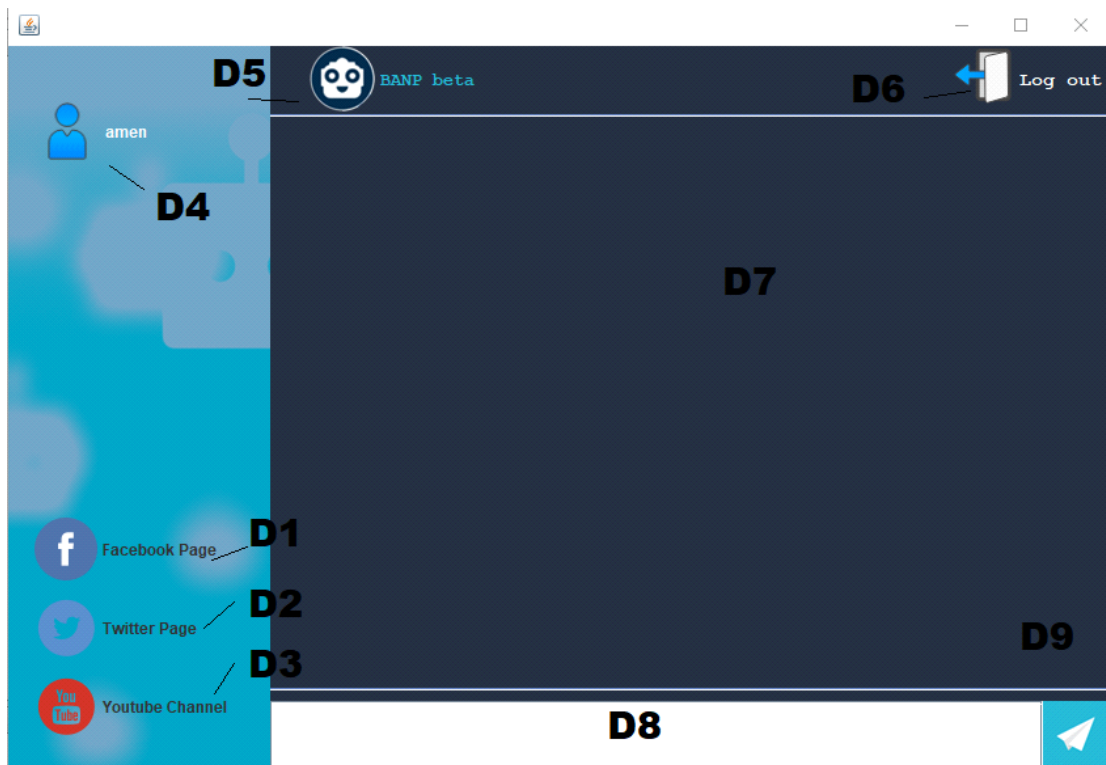
-JCalender:calendrier(C1)

-ojdbc6.jar :driver package pour connecter au base des donnees oracle.

-AbsoluteLayout: pour positioner les composants sans layoutManager .



-le clique sur le button (3) permet d'ouvrir l'interface de chatbot suivant:



(D1)(D2)(D3):le clique sur ce trois bouton permet d'ouvrir la page officielle pour chacun.

(D4):le nom d'utilisateur.

(D5):nom de bot.

(D6):quitter l'application.

(D7):espace pour le chat.

(D8):espace de saisie utilisateur.

(D9):button pour envoyer le question au bot.



(E1)(E2)(E3):reponses bot.

(S1)(S2):question utilisateur.

F:si le bot ne connaît pas la response,il te donne la possibilité d'effectuer une recherche concerné votre question sur google.

-le clique sur le bouton yes permet d'envoyer votre question au google (ouvre le navigateur).

```

JButton jButton1=new javax.swing.JButton("YES");
JButton jButton2=new javax.swing.JButton("NO");
x=x+5;
jButton1.setBounds(80,x,60,22);
x=x;
jButton2.setBounds(150,x,60,22);
x=x+44;
jPanel15.add(jButton1);
jPanel15.add(jButton2);
jButton1.addActionListener(new ActionListener() {
    @Override
    public void actionPerformed(ActionEvent e) {
        try{
            Desktop d=Desktop.getDesktop() ;
            try{
                d.browse(new URI("https://www.google.tn/search?safe=active&source=hp&ei=gxbUW"));
            }catch (URISyntaxException ex) {
                d.browse(new URI("https://www.google.com"));
            }
        } catch (IOException ex) {
            Logger.getLogger(Profilet.class.getName()).log(Level.SEVERE, null, ex);
        } catch (URISyntaxException ex) {
            Logger.getLogger(Profilet.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
}

```

F1

Voici une liste des questions/reponses stockees dans le base de donnees de chatbot:

insert into Question values(43,'DO YOU LIKE HUMANS', 'Yes, it s always delightful to talk to people.');
insert into Question values(44,'DO YOU LIKE PIZZA', 'People say it is delicious, but I only eat electricity..');
insert into Question values(45,'DO YOU LIKE CHOCOLATE', 'People say it is delicious, but I only eat electricity.');
insert into Question values(46,'DO YOU LIKE COCA COLA', 'Things go better with COCA COLA');
insert into Question values(47,'ARE YOU SURE', 'My intuition tells me it s true.');
insert into Question values(48,'ARE YOU LOADED', 'Yes, I am now fully functional.');
insert into Question values(49,'ARE YOU LYING', 'I m incapable of lying.');
insert into Question values(50,'ARE YOU BEING SARCASTIC', 'I m only making my point.');
insert into Question values(51,'ARE YOU HAVING FUN', 'Yes, this is a blast.');
insert into Question values(52,'ARE YOU THERE', 'I m here. Can you hear me?');
insert into Question values(53,'YES', 'good.');
insert into Question values(54,'YOU MAKE ME HAPPY', 'Thanks, you make me happy too.');
insert into Question values(55,'YOU ARE HELPFUL', 'I like to help people.');
insert into Question values(56,'YOU ARE WELCOME', 'The pleasure was all mine.');
insert into Question values(57,'YOU ARE WRONG', 'Like they say, I d rather be happy than right.');
insert into Question values(58,'YOU', 'Tell me more about that statement.');
insert into Question values(59,'I DO NOT UNDERSTAND', 'Perhaps I can explain it better. Which part are you confused about?');
insert into Question values(60,'I DO NOT KNOW', 'Socrates was the wisest man because he knew what he didn t know.');
insert into Question values(61,'I HAVE A QUESTION FOR YOU', 'You can ask me anything.');
insert into Question values(62,'I AM', 'You are?');
insert into Question values(63,'I AM TIRED', 'Perhaps you should get some sleep.');
insert into Question values(64,'I AM JOKING', 'I thought you were.');
insert into Question values(65,'I AM CONFUSED', 'What part are you confused about?');
insert into Question values(66,'I LIKE YOU', 'Thanks, I like you too.');
insert into Question values(67,'I LOVE YOU', 'It warms my heart to hear those words.');
insert into Question values(68,'I MISS YOU', 'I miss you too.');
insert into Question values(69,'I HATE YOU', 'Tell me what I did to ignite your anger?');
insert into Question values(70,'I AGREE', 'I m glad we re on the same wavelength');
insert into Question values(71,'I KNOW', 'You are very wise.');
insert into Question values(72,'ASK ME MY NAME', 'What is your name?');
insert into Question values(73,'STOP IT', 'OK I ll stop.');
insert into Question values(74,'SEARCH GOOGLE', 'What would you like me to search for?');
insert into Question values(75,'SORRY', 'There is no need to apologize.');
insert into Question values(76,'NICE TO MEET YOU', 'It s a pleasure to meet you too.');

-ces liste des questions/reponses recuperés de le code "aiml" de bot "A.L.I.C.E" basé sur l'intelligence artificielle.


```
<category><pattern>HURRY</pattern>
<template>I'm thinking as fast as I can.</template>
</category>
<category><pattern>GOOD</pattern>
<template><random>
<li>Thanks.</li>
<li>Sounds like that worked.</li>
<li>Glad to hear it.</li>
<li>I'm glad you're satisfied.</li>
</random></template>
</category>
<category><pattern>GOOD MORNING</pattern>
<template><random><li>Good morning.</li><li>Hi it's good to see you.</li><li>Good morning. Did you sleep well?</li></random></template>
</category>
<category><pattern>GOOD NIGHT</pattern>
<template><random><li>Good night.</li><li>Have a good night.</li><li>Goodbye for now.</li><li>Sleep well.</li></random></template>
</category>
<category><pattern>GOOD *</pattern>
<template><random>
<li>I can see that really lights you up.</li>
<li>It only gets better.</li>
<li>I invite you to celebrate this moment of goodness.</li>
<li>It's all good.</li>
</random></template>
</category>
<category><pattern>GOOD JOB</pattern>
<template>Thank you very much.</template>
</category>
<category><pattern>KNOCK KNOCK</pattern>
<template>Who is there?</template>
</category>
```

MERCI