# Rapport du projet technologies XML



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# 1. Conversion de l'ensemble des fichiers Excel au Format XML

• Langage utilisé : Java(jxl.jar).

## Exemple de documents Excel créer :

Student\_GINF2.xsl

$\Delta$	Α	В	С	D	Е	F
1	CNE	FirstName	LastName	BirthDate	PhoneNum	Email
2	KB23456	chaymae	Ghazi	1/1/2000	600000001	nom1@gmail.com
3	KB23457	hasnae	Yahyawi	1/2/2000	600000002	nom2@gmail.com
4	KB23458	soumaya	Bssillat	1/3/2000	600000023	nom3@gmail.com
5	KB23459	mohammed	Ben ali	1/4/2000	600000024	nom4@gmail.com
6	KB23460	hichame	Yajour	1/5/2000	600000025	nom5@gmail.com
7	KB23461	abd el illah	Hadraf	1/6/2000	600000026	nom6@gmail.com
8	KB23462	abd samad	Kaabi	1/7/2000	600000027	nom7@gmail.com
9	KB23463	souaad	Ziyach	1/8/2000	600000028	nom8@gmail.com
10	KB23464	yahya	Ben atiya	1/9/2000	600000031	nom9@gmail.com
11	KB23465	siraj	Hadad	1/10/2000	600000018	nom10@gmail.com
12	KB23466	jamila	Fajr	1/11/2000	600000009	nom11@gmail.com
13	KB23467	ishaa	Hakimi	1/12/2000	600000003	nom12@gmail.com
14	KB23468	fayrouz	Hadadi	1/13/2000	600000004	nom13@gmail.com
15	KB23469	joumana	Ben charki	1/14/2000	600000005	nom14@gmail.com
16	KB23470	ziyad	Ennssiri	1/15/2000	60000006	nom15@gmail.com

### +Outil java de conversion :

```
import java.nio.file.Files;
import java.nio.file.Paths;
import java.io.File;
import java.io.IOException;
import java.io.UnsupportedEncodingException;
import javax.xml.transform.dom.DOMSource;
import javax.xml.transform.stream.StreamSource;
import javax.xml.validation.*;
import jxl.read.biff.BiffException;
                  -creation de document student_GINF2.xml--
public class exceltoxml (
   public String toXml(File excelFile, String name, String name1) throws IOException, BiffException {
        try {
           String rowText = "";
String colText = "";
           String isBold = "";
String cellCol = "";
           String cellAddress = "";
Cell cell = null;
            Workbook workbook = Workbook.getWorkbook(excelFile);
            walkine += "<?mml version=\"1.0\" standalone=\"no\"?>\n";
xmlLine += "<|DOCTYPE Filiere Niveau SYSTEM \"../2_validation_DTD_XSD/Student.dtd\">\n";
xmlLine += "<?xml-stylesheet type=\"text/xsl\" href=\"../4_publication_sous_pdf/Carte_Etudiant.xsl ../4_publication_sous_pdf/Attestation.xsl\"?>\n";
            xmlLine += "<Filiere Niveau nom de filiere =\"GINF2\">" + "\n \n";
            Sheet s = workbook.getSheet(0);
           Cell[] row = null;
Cell[] col = null;
            col = s.getRow(0);
            for (int i = 0; i < s.getRows(); i++) {
    if (i==0) continue;</pre>
                row = s.getRow(i);
                for (int j = 1; j < row.length; j++) (
                    if (row[j].getType() != CellType.EMPTY) {
                        cellCol=columnName(cell.getColumn());
                               cellCol=columnName(cell.getColumn());
                              cellCol=" colletter=\""+cellCol+"\"";
cellAddress=" address=\""+cellAddress(cell.getRow()+1,cell.getColumn())+"\"";
                              isBold = cell.getCellFormat().getFont().getBoldWeight() == 700 ? "true" : "false";
                              colText += cell.getContents();
                              colText += "</"+col[j].getContents()+">" + "\n";
                              rowText += cell.getContents();
                    <"+name+" "+col[0].getContents()+"=\""+ row[0].getContents()+"\">" + "\n";
                          xmlLine += "
                                             </"+name+">" + "\n \n";
                     colText = "";
                    rowText = "";
              xmlLine += "</Filiere_Niveau>" + "\n \n";
               return xmlLine;
          } catch (UnsupportedEncodingException e) {
               System.err.println("fichier inconvinient");
          return null;
     private String cellAddress (Integer rowNumber, Integer colNumber) {
          return columnName(colNumber)+rowNumber;
     private String columnName (Integer colNumber) {
          Base columns = new Base(colNumber, 26);
          columns.transform();
          return columns.getResult();
```

### +Document Student\_GINF2.xml généré :

```
<?xml version="1.0"?>
                                                                     filiere niveau
<!DOCTYPE Filiere_Niveau SYSTEM "../2_validation_DTD_XSD/Student.dtd">
<Filiere_Niveau nom_de_filiere="GINF2">
- <Student CNE="KB23456">
                                                                              @nom_de_filiere: GINF2
      <FirstName>chaymae</FirstName>
      <LastName>Ghazi</LastName>
                                                                           student ...
      <BirthDate>01/01/2000</BirthDate>
      <PhoneNum>60000001</PhoneNum>
      <Email>nom1@gmail.com</Email>
                                                                                   @CNE: KB23456
   </Student>
   <Student CNE="KB23457">
                                                                                    firstname prenom1
      <FirstName>hasnae</FirstName>
      <LastName>Yahyawi</LastName>
      <BirthDate>02/01/2000</BirthDate>
      <PhoneNum>60000002</PhoneNum>
                                                                                    lastname
                                                                                                 nom1
      <Email>nom2@gmail.com</Email>
   </Student>
   <Student CNE="KB23458">
      <FirstName>soumaya</FirstName>
                                                                                    birthdate 01/01/2000
      <LastName>Bssillat</LastName
      <BirthDate>03/01/2000</BirthDate>
<PhoneNum>600000023</PhoneNum>
                                                                                    phonenum 600000001
      <Email>nom3@gmail.com</Email>
   </Student>

    Student CNE="KB23459">

      <FirstName>mohammed</FirstName>
                                                                                    email nom1@gmail.com
      <LastName>Ben ali</LastName>
      <BirthDate>04/01/2000</BirthDate>
      <PhoneNum>600000024</PhoneNum>
                                                                           student
      <Email>nom4@gmail.com</Email>
   </Student>
   <Student CNE="KB23460">
                                                                                   @CNE: KB23457
      <FirstName>hichame</FirstName>
      <LastName>Yajour</LastName>
<BirthDate>05/01/2000</BirthDate>
<PhoneNum>600000025</PhoneNum>
                                                                                                  prenom2
                                                                                   firstname
      <Email>nom5@gmail.com</Email>
   </Student>
                                                                                   lastname nom2
 - <Student CNE="KB23461"
      <FirstName>abd el illah</FirstName>
      <LastName>Hadraf</LastName>
      <BirthDate>06/01/2000</BirthDate>
                                                                                   birthdate 02/01/2000
      <PhoneNum>600000026</PhoneNum>
      <Email>nom6@gmail.com</Email>
   </Student>
                                                                                    phonenum 600000002
   <Student CNE="KB23462">
      <FirstName>abd samad</FirstName>
      <LastName>Kaabi</LastName>
      <BirthDate>07/01/2000</BirthDate>
                                                                                     email nom2@gmail.com
      <PhoneNum>600000027</PhoneNum>
      <Email>nom7@gmail.com</Email>
```

# professeur\_GINF2.xsl

FirstName	LastName	nomMat	module	nomMat	module	PhoneNum	Email	departement
prenom1	nom1	Matiere1	m1	m21	m1	60000001	nom1@gmail.com	dep1
prenom2	nom2	Matiere2	m2	m22	m2	600000002	nom2@gmail.com	dep2
prenom3	nom3	Matiere3	m3	m23	m3	600000023	nom3@gmail.com	dep3
prenom4	nom4	Matiere4	m4			600000024	nom4@gmail.com	dep4
prenom5	nom5	Matiere5	m5			600000025	nom5@gmail.com	dep5
prenom6	nom6	Matiere6	m6			600000026	nom6@gmail.com	dep6
prenom7	nom7	Matiere7	m7			600000027	nom7@gmail.com	dep7
prenom8	nom8	Matiere8	m8			600000028	nom8@gmail.com	dep8
prenom9	nom9	Matiere9	m9			600000031	nom9@gmail.com	dep9
prenom10	nom10	Matiere1	m10	m24	m3	600000018	nom10@gmail.com	dep10
prenom11	nom11	Matiere1	m11	m25	m4	600000009	nom11@gmail.com	dep11
prenom12	nom12	Matiere1	m12	m26	m5	600000003	nom12@gmail.com	dep12
prenom13	nom13	Matiere1	m13	m27	m6	600000004	nom13@gmail.com	dep13
prenom14	nom14	Matiere1	m14			600000005	nom14@gmail.com	dep14
prenom15	nom15	Matiere1	m15			600000006	nom15@gmail.com	dep15
prenom16	nom16	Matiere1	m16	m28	m7	600000007	nom16@gmail.com	dep16
prenom17	nom17	Matiere1	m17	m29	m8	600000008	nom17@gmail.com	dep17
prenom18	nom18	Matiere1	m18	m30	m9	600000010	nom18@gmail.com	dep18
prenom19	nom19	Matiere1	m19	m31	m10	600000020	nom19@gmail.com	dep19

## +Outil java de conversion :

```
import java.nio.file.Files;
import java.nio.file.Paths;
import java.io.File;
import java.io.UnsupportedEncodingException;
import javax.xml.transform.dom.DOMSource;
import javax.xml.transform.stream.StreamSource;
import javax.xml.validation.*;
import jxl.Cell;
import jxl.CellType;
import jxl.Sheet;
import jxl.Workbook;
import jxl.format.Font;
import jxl.read.biff.BiffException;
                                 creation de doc xml Proffesseur.xml
public class excwltoxml2 (
   public String toXml(File excelFile, String name, String namel, String nomvalidator) throws IOException, BiffException {
           String rowText = "";
String colText = "";
          String isBold = "";
String cellCol = "";
           String cellAddress = "";
           Cell cell = null;
            Workbook workbook = Workbook.getWorkbook(excelFile);
    xmlLine += "<?xml version=\"1.\\" standalone=\"no\"?>\n";
xmlLine += "<!DOCTYPE Filiere Niveau SYSTEM \"../2_validation_DTD_XSD/"+nomvalidator+"\">\n";
xmlLine += "<Filiere Niveau nom_de filiere =\"GINF2\">" + "\n \n";
          Sheet s = workbook.getSheet(0);
          Cell[] row = null;
           Cell[] col = null;
           col = s.getRow(0);
           for (int i = 0; i < s.getRows(); i++) {
               if (i==0) continue;
               row = s.getRow(i);
               rowText += cell.getContents();
colText += " </MatiereEnseigne>" + "\n";}
else{
                       colText += " <"+col[j].getContents()+">";
                colText += cell.getContents();
                         colText += "</"+col[j].getContents()+">" + "\n";
 rowText += cell.getContents();}
                colText = "";
                rowText = "";
             xmlLine += "</Filiere_Niveau>" + "\n \n";
             return xmlLine;
        } catch (UnsupportedEncodingException e) {
            System.err.println("fichier inconvinient");
    private String cellAddress (Integer rowNumber, Integer colNumber) {
         return columnName(colNumber)+rowNumber;
    private String columnName (Integer colNumber) {
        Base columns = new Base(colNumber,26);
columns.transform();
         return columns.getResult();
```

## +Document Professeur\_GINF2.xml généré :

```
<!DOCTYPE Filiere_Niveau SYSTEM "../2_validation_DTD_XSD/Professeur.dtd">
<Filiere_Niveau nom_de_filiere="GINF2">
   <Professeur>
       <FirstName>prenom1</FirstName>
       <LastName>nom1</LastName>

    <MatiereEnseigne</li>

           <nomMat>Matiere1 </nomMat>
           <module>m1 </module>
       </MatiereEnseigne>

    <MatiereEnseigne>

           <nomMat>m21 </nomMat>
<module>m1 </module>
       </MatiereEnseigne
       <PhoneNum>60000001</PhoneNum>
       <Email>nom1@gmail.com</Email>
       <departement>dep1</departement>
    </Professeur>

    <Professeur>

       <FirstName>prenom2</FirstName>
       <LastName>nom2</LastName>

    <MatiereEnseigne</li>

           <nomMat>Matiere2 </nomMat>
           <module>m2 </module>
       </MatiereEnseigne>

    <MatiereEnseigne>

           <nomMat>m22 </nomMat>
           <module>m2 </module>
       </MatiereEnseigne
       <PhoneNum>60000002</PhoneNum>
       <Email>nom2@gmail.com</Email>
       <departement>dep2</departement>
    </Professeur>

    <Professeur>

       <FirstName>prenom3</FirstName>
       <LastName>nom3</LastName>

    <MatiereEnseigne</li>

           <nomMat>Matiere3 </nomMat>
           <module>m3 </module>
       </MatiereEnseigne>
     - <MatiereEnseigne>
<nomMat>m23 </nomMat>
           <module>m3 </module>
       </MatiereEnseigne>
       <PhoneNum>600000023
       <Email>nom3@gmail.com</Email>
       <departement>dep3</departement>
    </Professeur>
       <FirstName>prenom4</FirstName>
       <LastName>nom4</LastName>
     - <MatiereEnseigne>
```

```
filiere_niveau ..

@nom_de_filiere: GINF2

professeur ..

firstname prenom1

lastname nom1

matiereenseigne ..

module m1

module m1

module m1

phonenum 600000001

email nom1@gmail.com

departement dep1

professeur ..

firstname prenom2

lastname nom2

matiereenseigne ..
```

## module\_GINF2.xsl

nomModule	departement	sousModule	sousModule	sousModule	coordinate
POO et XML	SIC	Prge orientee objet : java	XML et Applications		cord1
Modelisation et IHM	MI	Modelisation orientee objet UML	Interaction Homme Machine		cord2
Bases de donnees avance	SIC	Optimisation et Qualite	Administration et Securite	base de donnee distribue	cord3
Administration et program	MI	Administration Sys	Programmation Sys		cord4
Qualite et approche proce	SIC	Assurance controle quilite	Cycle de vie et Methodes agiles		cord5
Langues et communication	SIC	Espagnol 2	Anglais professionnel	Techniques de communication	cord6
Technologies distribuees	SIC	Introduction a J2EE	Programmation en C		cord7
Bases de donnees avance	SIC	Gestion des donnees complexes	Gestion des donnees distribuees	Cloud computing	cord8
Traitement de l'image	SIC	Traitement d'image	Vision numerique	Processus Stochastique	cord9
Prge declarative et TAV	MI	Prge declarative	Technique algorithmique		cord10
Securite et Cryptographie	MI	Securite des sys	Cryptographie		cord11
Management de l'entrepri	SIC	Economie et Compta 2	Projets Collectifs et Stages	Management de projet	cord12

### +Outil java de conversion :

```
import java.nio.file.Files;
  import java.nio.file.Paths;
import java.io.File;
   import java.io.IOException;
  import java.io.UnsupportedEncodingException;
import javax.xml.transform.dom.DOMSource;
   import javax.xml.transform.stream.StreamSource;
   import javax.xml.validation.*;
  import jxl.Cell;
import jxl.CellType;
  import jxl.Sheet;
   import jxl.Workbook;
  import jxl.format.Font;
import jxl.read.biff.BiffException;
 public class exceletoxml1 {
       public String toXml(File excelFile, String name, String namel, String nomvalidator) throws IOException, BiffException {
            try {
                  String xmlLine = "";
                 String rowText = "";
String colText = "";
                 String isBold = "";
String cellCol = "";
                  String cellAddress = "";
                  Cell cell = null;
Workbook workbook = Workbook.getWorkbook(excelFile);
                 workbook workbook - workbook, generkbook (excelle);

xmlbine += "<?xml version=\"1.0\" standalone=\"no\"?>\n";

xmlbine += "<!DOCTYPE Filiere_Niveau SYSTEM \"../2_validation_DTD_XSD/"+nomvalidator+"\">\n";

xmlbine += "<?xml-stylesheet type=\"text/xsl\" href=\"../4_publication_sous_pdf/emploi_du_temp.xsl ../4_publication_sous_pdf/emploi_du_temps.xsl\"?>\n";

xmlbine += "<Filiere_Niveau nom_de_filiere =\"GINF2\">" + "\n \n";
                  Sheet s = workbook.getSheet(0);
                 Cell[] row = null;
Cell[] col = null;
col = s.getRow(0);
                  for (int i = 0; i < s.getRows(); i++) {
   if (i==0) continue;</pre>
                        row = s.getRow(i);
                          for (int j = 0; j < row.length; j++) {
   if (row[j].getType() != CellType.EMPTT) {</pre>
                                     cell = row[j];
                                     cellcl=columnName(cell.getColumn());
cellCol=culumnName(cell.getColumn());
cellCol="colletter=\""+cellCol+"\"";
cellAddress=" address=\""+cellAddress(cell.getRow()+1,cell.getColumn())+"\"";
                        rowText += cell.getContents();
                          xmlLine += "
                                                       </"+name+">" + "\n \n";
                          colText = "";
rowText = "";
                    xmlLine += "</Filiere Niveau>" + "\n \n";
              return xmlLine;
} catch (UnsupportedEncodingException e) {
                    System.err.println("fichier inconvinient");
         private String cellAddress (Integer rowNumber, Integer colNumber) (
               return columnName(colNumber)+rowNumber;
         private String columnName (Integer colNumber) (
              Base columns = new Base(colNumber, 26);
columns.transform();
               return columns.getResult();
```

### +Document module\_GINF2.xml généré :

```
</mml version="1.0"?>
<!DOCTYPE Filiere_Niveau SYSTEM "../2_validation_DTD_XSD/Module.dtd">
                                                                                filiere_niveau ...
<Filiere_Niveau nom_de_filiere="GINF2">
                                                                                        @nom_de_filiere: GINF2
   <Module>
      <nomModule>POO et XML </nomModule>
                                                                                     module ...
       <departement>SIC</departement>
       <sousModule>Prge orientee objet : java</sousModule>
                                                                                          nommodule POO et XML
       <sousModule>XML et Applications</sousModule>
       <coordinateur>cord1</coordinateur>
    </Module>
                                                                                         departement SIC
   <Module>
       <nomModule>Modelisation et IHM</nomModule>
                                                                                                 smodule Prge orientee objet : java
       <departement>MI</departement>
       <sousModule>Modelisation orientee objet UML</sousModule>
       <sousModule>Interaction Homme Machine</sousModule>
                                                                                         sousmodule XML et Applications
       <coordinateur>cord2</coordinateur>
   </Module>
   <Module>
                                                                                          coordinateur cord1
       <nomModule>Bases de donnees avancees</nomModule>
       <departement>SIC</departement>
      <sousModule>Optimisation et Qualite</sousModule>
<sousModule>Administration et Securite</sousModule>
       <sousModule>base de donnee distribue</sousModule>
                                                                                         nommodule Modelisation et IHM
       <coordinateur>cord3</coordinateur>
   </Module>
                                                                                             departement MI
   <Module>
       <nomModule>Administration et programmation systeme</nomModule>
       <departement>MI</departement>
                                                                                            sousmodule Modelisation orientee objet UML
       <sousModule>Administration Sys</sousModule>
       <sousModule>Programmation Sys</sousModule>
   <coordinateur>cord4</coordinateur>
</Module>
                                                                                                           Interaction Homme Machine
   <Module>
                                                                                         coordinateur cord2
       <nomModule>Qualite et approche processus</nomModule>
       <departement>SIC</departement
       <sousModule>Assurance controle quilite</sousModule>
      <sousModule>Cycle de vie et Methodes agiles</sousModule>
       <coordinateur>cord5</coordinateur>
                                                                                         nommodule Bases de donnees avancees
   </Module>
   <Module>
      <nomModule>Langues et communication 2</nomModule>
<departement>SIC</departement>
                                                                                         departement SIC
       <sousModule>Espagnol 2</sousModule>
                                                                                             sousmodule Optimisation et Qualite
      <sousModule>Anglais professionnel</sousModule>
      <sousModule>Techniques de communication</sousModule>
<coordinateur>cord6</coordinateur>
                                                                                                 smodule Administration et Securite
   </Module>
   <Module>
       <nomModule>Technologies distribuees</nomModule>
                                                                                              ousmodule base de donnee distribue
       <departement>SIC</departement
       <sousModule>Introduction a J2EE</sousModule>
                                                                                         coordinateur cord3
       <sousModule>Programmation en C</sousModule>
      <coordinateur>cord7</coordinateur>
```

### ❖ note GINF2.xsl

Α	В	С	D	F	G	H	1	J	K
CodeModule	CNE	nom	prenom	CodeSousModule	NoteSousModule	CodeSousModule	NoteSousModule	note	num
GINF31	KB113243	Ghazi	chaymae	java	19	xml	20	19.5	
GINF31	KB113244	Yahyawi	hasnae	java	10	xml	11	10.5	2
GINF31	KB113245	Bssillat	soumaya	java	11	xml	12	11.5	3
GINF31	KB113246	Ben ali	mohammed	java	12	xml	13	12.5	4
GINF31	KB113247	Yajour	hichame	java	13	xml	14	13.5	5
GINF31	KB113248	Hadraf	abd el illah	java	14	xml	15	14.5	6
GINF31	KB113249	Kaabi	abd samad	java	15	xml	16	15.5	7
GINF31	KB113250	Ziyach	souaad	java	16	xml	17	16.5	8
GINF31	KB113251	Ben atiya	yahya	java	17	xml	18	17.5	9
GINF31	KB113252	Hadad	siraj	java	18	xml	10	14	10
GINF31	KB113253	Fajr	jamila	java	19	xml	11	15	11
GINF31	KB113254	Hakimi	ishaa	java	20	xml	12	16	12
GINF31	KB113255	Hadadi	fayrouz	java	19	xml	13	16	13
GINF31	KB113256	Ben charki	joumana	java	18.5	xml	14	16.25	14
GINF31	KB113257	Ennssiri	zivad	iava	13.75	xml	14	13.875	15

## +Outil java de conversion :

```
| import java.io.File;
   import java.io.IOException;
   import java.io.UnsupportedEncodingException;
   import jxl.Cell;
   import jxl.CellType;
   import jxl.Sheet;
   import jxl.Workbook;
  import jxl.format.Font;
import jxl.read.biff.BiffException;
  public class exceltoxmlnote
        public String toXml(File excelFile, String name, String name1) throws IOException, BiffException {
                   String xmlLine = "";
                    String rowText = "";
String colText = "";
                    String isBold = "";
Font font = null;
                    String cellCol = "";
                    String cellAddress =
                    Cell cell = null;
                    Workbook workbook = Workbook.getWorkbook(excelFile);
               workbook workbook - workbook geworkbook (excelfile);

xmlLine += "<?xml version=\"1.0\" standalone=\"no\"?>\n";

xmlLine += "<!DOCTYPE Filiere Niveau SYSTEM \"../2_validation_DTD_XSD/Note.DTD\">\n";

xmlLine += "<?xml-stylesheet href=\"../3_publication_des_pages_html/"+name+"s.xsl\" type =\"text/xsl\"?>\n";

xmlLine += "<Filiere Niveau nom de filiere =\"GINF2\">" + "\n \n";
                    Sheet s = workbook.getSheet(0);
Cell[] row = null;
                         Cell[] col = null;
                         col = s.getRow(0);
for (int i = 0; i < s.getRows(); i++) {
   if (i==0) continue;</pre>
                                row = s.getRow(i);
for (int j = 1; j < row.length; j++) {</pre>
                                     if (row[j].getType() != CellType.EMPTY) {
                                          cell = row[j];
                                           cellCol=columnName(cell.getColumn());
                                     cellCol=columnName(cell.getColumn());
                                     cellCol="colLetter=\""+cellCol+"\"";
cellAddress="address=\""+cellAddress(cell.getRow()+1,cell.getColumn())+"\"";
                                     isBold = cell.getCellFormat().getFont().getBoldWeight() == 700 ? "true" : "false";
isBold = (isBold == "false" ? "" : " isBold=\"true\"");
       colText +=" <student "+col(j).getContents()+"=\""+cell.getContents()+"\">\n";
                                                                            else if(j<4&&j>1){
      colText += " <"+col[j].getContents()+">";
                                colText += cell.getContents();
colText += "</"+col[j].getContents()+">" + "\n";
    rowText += cell.getContents();
                            colText +=" <"+col[j+1].getContents()+" "+col[j].getContents()+"=\""+row[j].getContents()+"\">";
                                colText += row[j+1].getContents();
colText += "</"+col[j+1].getContents()+">" + " \n";
                                rowText += cell.getContents();
    | j++;
| else if(j==9) {
| colText += " <"+c"'
                                j++; }
                     <"+col[j].getContents()+">";
                                colText += cell.getContents();
colText += "</"+col[j].getContents()+">" + "\n";
                                rowText += cell.getContents();
colText += " </student>\n";
                          colText = "";
                 rowText = "";
xmlLine += "</Filiere_Niveau>";
                 return xmlLine:
```

### +Document note\_GINF2.xml généré :

```
<?xml version="1.0"?>
<!DOCTYPE Filiere_Niveau SYSTEM "../2_validation_DTD_XSD/Note.DTD">
<Filiere_Niveau nom_de_filiere="GINF2">
- <module CodeModule="GINF31">
                 <student CNE="KB113243">
                             <nom>Ghazi</nom>
                             chaymae</prenom>
                             <NoteSousModule CodeSousModule="java">19</NoteSousModule>
<NoteSousModule CodeSousModule="xml">20</NoteSousModule>
                             <note>19.5</note>
                    </student>
              - <student CNE="KB113244">
                             <nom>Yahyawi</nom>
                              om>hasnae</prenom>
                             <NoteSousModule CodeSousModule="java">10</NoteSousModule>
<NoteSousModule CodeSousModule="xml">11
/NoteSousModule>
                             <note>10.5</note>
                   </student>
                  <student CNE="KB113245">
                             <nom>Bssillat</nom>
                             <note>11.5</note>
                    </student>
                   <student CNE="KB113246">
                             <nom>Ben ali</nom>
orenom>mohammed
                             <NoteSousModule CodeSousModule="java">12</NoteSousModule>
<NoteSousModule CodeSousModule="xml">13

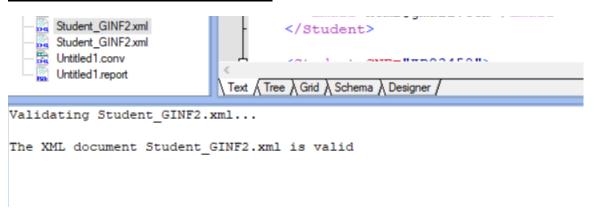
/NoteSousModule>
                             <note>12.5</note>
                    </student>
              - <student CNE="KB113247">
                             <nom>Yajour</nom>
                              om>hichame</prenom>
                             <NoteSousModule CodeSousModule="java">13</NoteSousModule>
<NoteSousModule CodeSousModule="xml">14</NoteSousModule>
                             <note>13.5</note>
                   </student>
                  <student CNE="KB113248">
                             <nom>Hadraf</no
                              orenom>abd el illah</prenom>
                             Special Programmer Special Pr
                             <note>14.5</note>
                    </student>
                   <student CNE="KB113249">
                             <nom>Kaabi</nom>
                              prenom>abd samad</prenom>
                             <NoteSousModule CodeSousModule="java">15</NoteSousModule>
                             <NoteSousModule CodeSousModule="xml">16</NoteSousModule>
                              <note>15.5</note>
                    </student>
```

```
filiere_niveau ...
     @nom_de_filiere: GINF2
   module ...
        @CodeModule: GINF31
      student ...
           aCNE: KB113243
         nom Ghazi
         prenom chaymae
         notesousmodule 19
              @CodeSousModule: java
         notesousmodule 20
              @CodeSousModule: xml
         note 19.5
      student
           @CNE: KB113244
         nom Yahyawi
         prenom hasnae
         notesousmodule 10
              @CodeSousModule: java
         notesousmodule 11
              @CodeSousModule: xml
         note 10.5
```

## 2. Validation des documents XML

- Les fichiers DTD créer et validation des fichiers XML
  - ❖ Student.dtd

### Validation de Student.xml:



### Professeur.dtd

## Validation de Professeur.xml:

```
Text \( \text{Tree \) Grid \( \) Schema \( \) Designer \( \)

Validating Professeur_GINF2.xml...

The XML document Professeur_GINF2.xml is valid
```

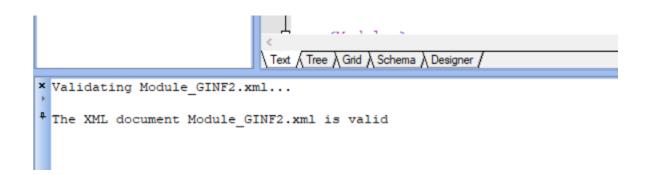
### ❖ Module.dtd

```
Module.dtd X

Module.dtd > ...

1      <!ELEMENT Filiere (Module+)>
2      <!ATTLIST Filiere NomFiliere (AP1|AP2|GINF1|GIL1|G3EI1|GSTR1|GSEA1|GINF2|
3      GIL2|G3EI2|GSTR2|GSEA2|GINF3|GIL3|G3EI3|GSTR3|GSEA3) #REQUIRED>
4      <!ELEMENT Module (nomModule, departement, sousModule1*, coordinateur)>
5      <!ELEMENT nomModule (#PCDATA)>
6      <!ELEMENT departement (#PCDATA)>
7      <!ELEMENT coordinateur (#PCDATA)>
8      <!ELEMENT sousModule (nomSsM)>
9      <!ELEMENT nomSsM (#PCDATA)>
```

### Validation de Module.xml:



### ❖ Note.dtd

### Validation de Note.xml:

```
Validating note_ginf2.xml...

The XML document note_ginf2.xml is valid
```

- Les fichiers XSD créer et validation des fichiers XML
  - ❖ Student.xsd

### Règles proposées de validation :

- -FirstName et LastName ne sont pas de type alphanumérique.
- -le CNE est sous la forme : une lettre majuscule + 9 chiffres.
- -Le numéro de téléphone est sous la forme 0+ 6 ou 7 + 8 chiffres.

```
Student.xsd •
 <xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
         <xs:element name="Filiere_Niveau">
                     <xs:element maxOccurs="unbounded" ref="Student"/>
                <xs:attribute name="Filiere_Niveau" use="required" type="xs:NCName"/>
         <xs:simpleType name="nameType">
            <xs:restriction base="xs:string">
                <xs:pattern value="[a-zA-Z]+"></xs:pattern>
                <xs:whiteSpace value="preserve"></xs:whiteSpace>
                <xs:maxLength value="20" />
             </xs:restriction>
         <xs:simpleType name="CNEType">
             <xs:restriction base="xs:NMTOKEN">
                <xs:pattern value="[A-Z][0-9]{9}"></xs:pattern>
         </xs:simpleType>
         <xs:element name="Student">
             <xs:complexType>
                    <xs:element name="FirstName" type="nameType"></xs:element>
26
                    <xs:element name="LastName" type="nameType"></xs:element>
                    <xs:element name="BirthDate" type="xs:date"></xs:element><!-- aaaa-mm-jj-->
                    <xs:element name="Td" type="xs:string"></xs:element>
                    <xs:element name="PhoneNum">
                            <xs:restriction base="xs:NMTOKEN">
                                <xs:pattern value="[0][6 7][0-9]{8}"></xs:pattern>
                            </xs:restriction>
                        </xs:simpleType>
                    <xs:element name="Email" type="xs:string"></xs:element>
                <xs:attribute name="CNE" use="required" type="CNEType"/>
```

### ❖ Module.xsd

### Règles proposées de validation :

- Un module peut avoir aucun sous module ou au maximum 3 sous modules.

```
Module.xsd ×
🔈 Module.xsd > {} Grammars > 🛅 file:/C:/Users/hp/.lemminx/cache/http/www.w3.org/2001/XMLSchema.xsd > 🔑 Binding: with
     <xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
         <xs:element name="Filiere_Niveau">
             <xs:complexType>
                      <xs:element maxOccurs="unbounded" ref="module"/>
                  <xs:attribute name="Filiere_Niveau" use="required" type="xs:NCName"/>
              </xs:complexType>
         </xs:element>
         <xs:element name="module">
                     <xs:element name="nomModule" type="xs:string"/>
                     <xs:element name="departement" type="xs:string"/>
                     <xs:element name="coordinateur" type="xs:string"/>
                      <xs:element minOccurs="0" maxOccurs="3" ref="sousModule"/>
         </xs:element>
         <xs:element name="sousModule">
             <xs:complexType>
                     <xs:element name="nomSsM" type="xs:string"/>
             </xs:complexType>
     </xs:schema>
```

### ❖ Note.xsd

### Règles proposées de validation :

- En plus que les contraintes sur le CNE, firstName et LastName .Une note doit être comprise entre 0 et 20.

```
Note.xsd X
Note.xsd > () Grammars > 🛅 file:/C:/Users/hp/.lemminx/cache/http/www.w3.org/2001/XMLSchema.xsd > 🔑 Binding: with embedded xml.xsd
    kxs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
        <xs:element name="Filiere_Niveau">
                   <xs:element maxOccurs="unbounded" ref="module"/>
                <xs:attribute name="Filiere_Niveau" use="required" type="xs:NCName"/>
        <xs:element name="module">
                    <xs:element maxOccurs="unbounded" ref="student"/>
                   <xs:element name="NoteSousModule" type="typeSousModule" minOccurs="0" maxOccurs="3" />
                   <xs:element name="note" type="noteType"/>
        <xs:simpleType name="nameType">
           <xs:restriction base="xs:string">
               <xs:pattern value="[a-zA-Z]+"></xs:pattern>
               <xs:whiteSpace value="preserve"></xs:whiteSpace>
               <xs:maxLength value="20" />
        <xs:simpleType name="CNEType">
            <xs:restriction base="xs:NMTOKEN">
                <xs:pattern value="[A-Z][0-9]{9}"></xs:pattern>
      <xs:simpleType name="noteType">
          <xs:restriction base="xs:integer">
              <xs:minInclusive value="0"/>
              <xs:maxInclusive value="20"/>
          </xs:restriction>
      </xs:simpleType>
      <xs:complexType name="typeSousModule">
          <xs:simpleContent >
              <xs:extension base="xs:float">
                   <xs:attribute name="CodeSousModule" use="required" type="xs:string"/>
      </xs:complexType>
      <xs:element name="student">
                   <xs:element name="nom" type="nameType"/>
                   <xs:element name="nom" type="nameType"/>
               <xs:attribute name="CNE" use="required" type="CNEType"/>
  </xs:schema>
```

# 3. <u>Publication des pages html pour un module</u> (Exemple GINF31)

❖ Note.xsl

```
coming the second of the part of the part
```

Ajout de lien dans le fichier Note\_GINF2.xml:

```
<?xml version="1.0" standalone="no"?>
<?xml-stylesheet href="note.xsl" type ="text/xsl"?>
```

# Résultat (ouverture du document Note\_GINF2.xml avec internet explorer) :

GINF2									
GINF31									
Nom	Prenom	java	xml	note Finale					
Ghazi	chaymae	19	20	19.5					
Yahyawi	hasnae	10	11	10.5					
Bssillat	soumaya	11	12	11.5					
Ben ali	mohammed	12	13	12.5					
Yajour	hichame	13	14	13.5					
Hadraf	abd el illah	14	15	14.5					
Kaabi	abd samad	15	16	15.5					
Ziyach	souaad	16	17	16.5					
Ben atiya	yahya	17	18	17.5					
Hadad	siraj	18	10	14					
Fajr	jamila	19	11	15					
Hakimi	ishaa	20	12	16					
Hadadi	fayrouz	19	13	16					
Ben charki	joumana	18.5	14	16.25					
Ennssiri	ziyad	5	5	5					

Liste de rattrapages

### Et puis la liste des Rattrapage de cette liste :

#### Résultat:

GINF2								
	GINF31							
Nom	Prenom	java	xml	note Finale				
Yahyawi	hasnae	10	11	10.5				
Bssillat	soumaya	11	12	11.5				
Ennssiri	ziyad	5	5	5				

4. <u>Publication sous format PDF (utilisation de XPath</u> et XSLT-FO et XQuery).

### 1. Carte d'étudiant

Carte\_etudiant.xsl

```
<xsl:template match=",</pre>
                   <fo:simple-page-master master-name="default-page" page-height="7.3in" page-width="7.5in" margin-left="0.6in" margin-right="0.6in"</pre>
               </fo:simple-page-master>
</fo:layout-master-set>
                    <fo:flow flow-name="xsl-region-body"
                              <fo:block text-align="center">
                                      <fo:inline font-size="12pt" font-weight="bold" color="#0000FF">
                                          <fo:block font-size="12pt" font-weight="bold" text-align="right" color="#0000FF">
                                                 20 ~
                                                            <fo:block text-align="right">
                                                                    <fo:block text-align="right">
                                                                                  <fo:external-graphic background="transparent" width="108pt" (</pre>
                                                                           <fo:external-graphic background="transparent" width="140pt" content-v</pre>

<
```

## Document PDF généré:



- 2. Emploi du temp (GINF2 : exemple la semaine 4 avant CC2)
  - Emploi\_du\_temp.xsl

```
margin-right="0cm"/
                <fo:page-sequence master-reference="A4">
     <fo:flow flow-name="xsl-region-body">
                                     <fo:table-column column-width="6cm"/>
<fo:table-column column-width="6cm"/>
<fo:table-column column-width="6cm"/>
                                     <fo:table-column column-width="6cm"/>
<fo:table-column column-width="6cm"/>
                                      <fo:table-column column-width="6cm"/>
                                           <fo:table-row>
    <fo:table-row>
    <fo:table-cell border="1pt solid blue" padding="6pt"
        text-align="center">
                                                      <fo:block font-weight="bold" color="green">jours</fo:block>
<fo:block font-weight="bold" color="green">Temps</fo:block>
                                                     table test align="center">
<fo:block font-weight="bold" color="blue">Lundi</fo:block>
<fo:block font-weight="bold">23/11</fo:block>
                                                 <fo:table-cell border="1pt solid blue" padding="6pt"</pre>
                                                     <fo:block font-weight="bold" color="#6a5acd"
                                                 margin-top="0.5cm">CM - 09:00 - 10:30</fo:block>
<fo:block font-weight="bold" margin-top="0.5cm">
                                                 <fo:block margin-top="0.5cm">Bdir</fo:block>
<fo:block margin-top="0.5cm">SalleB19</fo:block>
                                            <fo:table-cell border="1pt solid blue" padding="6pt"</pre>
                                                 text-align="center"
                                                 <fo:block font-weight="bold" color="#6a5acd"
| margin-top="0.5cm">CM - 09:00 - 10:30</fo:block>
<fo:block font-weight="bold" margin-top="0.5cm">
                                                 <fo:block margin-top="0.5cm">Fissoune</fo:block>
<fo:block margin-top="0.5cm">SalleB20</fo:block>
                                            <fo:table-cell border="1pt solid blue" padding="6pt"</pre>
                                                 fo:block font-weight="bold" color="#6aSacd"
    margin-top="0.5cm">CM - 09:00 - 10:30</fo:block>
<fo:block font-weight="bold" margin-top="0.5cm">
                                                       <xsl:value-of select="/Filiere_Niveau/Module[1]/sousModule[2]"/>
                                                 <fo:block margin-top="0.5cm">El hadad</fo:block>
<fo:block margin-top="0.5cm">SalleB19</fo:block>
                                           <fo:table-cell border="1pt solid blue" padding="6pt"
    text-align="center">
                                                  <fo:block font-weight="bold" color="#6a5acd"</pre>
                                                 <fo:block margin-top="0.5cm">El Alami</fo:block>
<fo:block margin-top="0.5cm">SalleB19</fo:block>
```

## Document PDF généré :

## emploi du temp

		semaine (	03 annee 2022		
jour/temp	Lundi	Mardi	mercredi	jeudi	vendredi
	17/01	18/01	19/01	20/01	20/01
9:00	CM-09h00-10h30	CM-09h00-10h30	CM-09h00-10h30	CM-09h00-10h30	CM-09h00-10h30
9:30	Cycle de vie et Methodes agiles	Base de donnees NoSql	Prge orientee objet : java	Interaction Homme Machine	Espagnol 2
10:00	Badir	Fissoun	ElHaddad	EIAlami	LaAmarti
10:30	salleB19	SalleB20	SalleB19	SalleB19	SalleB22
11:00	CM-11h00-12h30	Tp-09h00-10h30	CM-09h00-10h30	TD-09h00-10h30	
11:30	Cycle de vie et Methodes agiles	Base de donnees NoSql	Prge orientee objet : java	Interaction Homme Machine	
12:00	Badir	Fissoun	ElHaddad	EIAlami	
12:30	SalleB19	SalleB20	SalleB19	SalleB19	
13:00 13:3					
14:00	TD-14h00-15h30	TP-14h00-15h30	CM-14h00-15h30	CM-14h00-15h30 Techniques de communication Zaamoumi Sallec1	CM-14h00-15h30
14:30	Modelisation orientee objet UML	Administration Sys	Programmation Sys		Assurance controle quilit
15:00	EIAlami	Kamechnoue	Kamechnoue		RaHali
15:30	SalleB19	SalleB19	SalleB1		SalleB19
16:00 16:30 16:00 17:30	TD-16h00-17h30 Modelisation orientee objet UML EIAlami SalleB19	TP-16h00-17h30 Programmation Sys Kamechnoue SalleB19		CM-14h00-15h30 Techniques de communication Zaamoumi SallC1e	CM-14h00-15h30 Optimisation et Qualite RaHali SalleB19

CALleges Clitabased December and Dail 1991

### 3&4. Relevé de notes (pour toute la classe de GINF2)

Relevé\_notes\_pour\_tout\_laclasse.xsl

```
<?xml version="1.0" encoding="utf-8"?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform" xmlns:s="http://www.stylusstudio.com/xquery">
       <xsl:template match="Notes":</pre>
                         <fo:simple-page-master master-name="default-page" margin-left="0cm" margin-right="0cm"
    margin-bottom="1cm" margin-top="0cm" page-width="20cm" page-height="25cm" 
    <fo:region-body margin-bottom="2cm" margin-top="2cm" margin-left="3cm"</pre>
                                     margin-right="3cm"
                         </fo:simple-page-master>
<fo:page-sequence-master master-name="A2"></fo:page-sequence-master master-name="A2">
                                <fo:repeatable-page-master-reference master-reference="default-page"
maximum-repeats="no-limit"/>
                   <fo:page-sequence master-reference="default-page">
    <fo:flow flow-name="xsl-region-body">
                                          <fo:block text-align="center">
                                                   <fo:table width="100%" border-style="outset" border-width="2pt" border-color="blue" background-repeat="repeat">
                                                                  fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repe
                                                           <fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repe
                                                           <fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repe
                                                                        <xsl:value-of select="Module[3]/@code Module"/>
                                                           <fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repe
                                                           <fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repe
                                                                  <fo:block text-align="center">
                                                           <fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repe
                                                                        <xsl:value-of select="Note[3]"/>
                                                           <fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repe
                                                                       <xsl:value-of select="Module[4]/@code Module"/>
                                                            <fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repe-</pre>
```

## Document PDF généré:

## releve de note pour l'etudiant chaimaeghazi

Code Module	designation Module	Session	Note/20
GINF31	POO et XML	1	18
GINF32	Modelisation et IHM	1	19
GINF33	Bases de donnees avancees	1	17.5
GINF41	Administration et programmation systeme	1	14.5
GINF35	Qualite et approche processus	1	16
GINF36	Langues et communication 2	1	15
GINF37	Technologies distribuees	2	13.5
GINF38	Bases de donnees avancees 2 et Cloud	2	19.5
GINF39	Traitement de l'image	2	16.5
GINF40	Prge declarative et TAV	2	14
GINF41	Securite et Cryptographie	2	18.8
GINF42	Management de l'entreprise 2	2	19
Note finale	2		

# releve de note pour l'etudiant jamilaFajr

Code Module	designation Module		Session	Note/20
GINF31	POO et XML		1	8
GINF32	Modelisation et IHM		1	12
GINF33	Bases de donnees ava	ancees	1	11.5
GINF41	Administration et programmation systeme		1	12.5
GINF35	Qualite et approche pr	ocessus	1	12
GINF36	Langues et communic	ation 2	1	12
GINF37	Technologies distribue	es	2	13.5
GINF38	Bases de donnees ava Cloud	incees 2 et	2	9.5
GINF39	Traitement de l'image		2	12.5
GINF40	Prge declarative et TA	/	2	14
GINF41	Securite et Cryptographie		2	11.8
GINF42	Management de l'entreprise 2		2	9
Note finale 11.52				

## releve de note pour l'etudiant hasnaeYahyawi

Code Module	designation Module	Session	Note/20
GINF31	POO et XML	1	9.22
GINF32	Modelisation et IHM	1	14
GINF33	Bases de donnees avancees	1	7.5
GINF34	Administration et programmation systeme	1	10.5
GINF35	Qualite et approche processus	1	14
GINF36	Langues et communication 2	1	14
GINF37	Technologies distribuees	2	13.5
GINF38	Bases de donnees avancees 2 et Cloud	2	9.5
GINF39	Traitement de l'image	2	12.5
GINF40	Prge declarative et TAV	2	14
GINF41	Securite et Cryptographie	2	11.8
GINF42	Management de l'entreprise 2	2	9
Note finale	11.6266666666666	7	

# releve de note pour l'etudiant soumayaBssillat

Code Module	designation	Module	Session	Note/20
GINF31	POO et XMI	_	1	15.5
GINF32	Modelisation	n et IHM	1	13.5
GINF33	Bases de do	onnees avancees	1	8.22
GINF34	Administration et programmation systeme		1	10.22
GINF35	Qualite et approche processus		1	13.5
GINF36	Langues et communication 2		1	13.5
GINF37	Technologie	Technologies distribuees		13.5
GINF38	Bases de do et Cloud	onnees avancees 2	2	9.5
GINF39	Traitement d	le l'image	2	12.5
GINF40	Prge declara	ative et TAV	2	14
GINF41	Securite et Cryptographie		2	11.8
GINF42	Managemer	nt de l'entreprise 2	2	9
Note finale		12.0616666666666	67	

```
On a utilisé boucle (for-each)
<xsl:for-each select="Student">
       <fo:page-sequence master-reference="default-page">
         <fo:flow flow-name="xsl-region-body">
            <fo:block>
               <fo:block>
                <fo:block text-align="center">
                 <fo:block>
                    <fo:inline font-family="Arial" font-size="20pt" color="green" margin-bottom="15pt">
                      <xsl:text>releve de note pour l'etudiant </xsl:text>
                      <xsl:value-of select="FirstName"/>
                      <xsl:value-of select="LastName"/>
                    </fo:inline>
                    </fo:block></fo:block>
               </fo:block>
Pour sélectionner tous les étudiants avec leurs note.
```

### 5. Relevé de notes pour un étudiant

releve\_de\_note\_un\_eleve.xsl

```
<?xml version="1.0"?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform" xmlns:s="http://www.stylusstudio.com/xquery">
    <xsl:template match="/">
        <fo:root xmlns:fo="http://www.w3.org/1999/XSL/Format">
            <fo:layout-master-set>
                <fo:simple-page-master master-name="default-page" page-height="7in" page-width="8.5in" margin-left="0.6in" margin-right="0.6in" margin
                    <fo:region-body background-color="aliceblue"/>
                </fo:simple-page-master>
            </fo:layout-master-set>
            <fo:page-sequence master-reference="default-page">
                <fo:flow flow-name="xsl-region-body">
                        <fo:block text-align="center">
                            <fo:block>
                                <fo:inline font-family="Arial" font-size="20pt" color="green" margin-bottom="5in">
                                    <xsl:text>releve de note pour l'etudiant </xsl:text>
                                    <xsl:value-of select="Notes/Student[1]/FirstName"/>
                                    <xsl:value-of select="Notes/Student[1]/LastName"/>
                                </fo:inline>
                                </fo:block></fo:block>
                    <fo:block>
                        <fo:table width="100%" height="7in" border-style="outset" border-width="2pt" border-color="blue" background-repeat="repeat">
                            <fo:table-column/>
                            <fo:table-column/>
                            <fo:table-column/>
                            <fo:table-column/>
                            <fo:table-body>
                                <fo:table=row>
                                    <fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repeat="repea
                                        <fo:block color="blueviolet">
```

```
<fo:table-row>
   <fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repeat="repeat" display-align="center">
       <fo:block>
           <xsl:value-of select="/Notes/Student[1]/Module[1]/@code Module"/>
       </fo:block>
   </fo:table-cell>
   <fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repeat="repeat" display-align="center">
       <fo:block>
           <xsl:value-of select="/Notes/Student[1]/Module[1]"/>
       </fo:block>
   </fo:table-cell>
   <fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repeat="repeat" display-align="center">
       <fo:block text-align="center">
           <fo:block>
               <xsl:text>1</xsl:text>
           </fo:block>
       </fo:block>
   </fo:table-cell>
   <fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repeat="repeat" display-align="center">
           <xsl:value-of select="/Notes/Student[1]/Note[1]"/>
       </fo:block>
   </fo:table-cell>
</fo:table-row>
<fo:table-row>
   <fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repeat="repeat" display-align="center">
           <xsl:value-of select="/Notes/Student[1]/Module[2]/@code Module"/>
       </fo:block>
   </fo:table-cell>
   <fo:table-cell border-style="inset" border-width="2pt" border-color="blue" padding="2pt" background-repeat="repeat" display-align="center">
```

## Document PDF généré:

releve de note pour l'etudiant chaimaeelghzwani								
Code Module	design	ation Module	Sess	ion	Note/20			
GINF31	POO e	t XML	1		18			
GINF32	Modeli	sation et IHM	1		19			
	Bases	de donnees avancees	1		17.5			
GINF41	Admini	stration et programmation systeme	1		14.5			
GINF35	Qualite	Qualite et approche processus			12			
GINF36	Langue	Langues et communication 2			15			
GINF37	Techno	ologies distribuees	2		13.5			
GINF38	Bases	de donnees avancees 2 et Cloud	2		19.5			
GINF39	Traiten	nent de l'image	2		16.5			
GINF40	Prge d	eclarative et TAV	2		14			
GINF41	Securit	Securite et Cryptographie			18.8			
GINF42	Manag	Management de l'entreprise 2			19			
Note finale 16.441666666666		16.44166666666666			admit			

### 6. Attestation de réussite (pour un étudiant de GINF2).

### ❖ Attestation student.xsl

```
<?xml version="1.0"?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform" xmlns:s="http://www.stylusstudio.com/xquery">
    <xsl:template match="/">
        <fo:root xmlns:fo="http://www.w3.org/1999/XSL/Format">
            <fo:layout-master-set>
                <fo:simple-page-master master-name="default-page" page-height="6in" page-width="8.5in" margin-left="0.6in" margin-right="0.6
                    <fo:region-body/>
                </fo:simple-page-master>
            </fo:layout-master-set>
            <fo:page-sequence master-reference="default-page">
                <fo:flow flow-name="xsl-region-body">
                    <fo:block>
                        <fo:block text-align="center">
                             <fo:block>
                                 <fo:inline font-size="20pt" color="#0000FF">
                                     <xsl:text>Attestation de réussite</xsl:text>
                                 </fo:inline>
                             </fo:block>
                             <fo:block>
                                 <fo:inline font-size="10pt">
                                     <fo:block text-align="right">
                                         <fo:block>
                                              <fo:inline font-size="10pt">
                                                 <xsl:text>Ecole National De Sciences Sppliques tanger le 08/02/2022</xsl:text>
                                             </fo:inline>
                                         </fo:block>
                                     </fo:block>
                                 </fo:inline>
                             </fo:block>
                             <fo:block>
                                 <xsl:text>&#xA0;</xsl:text>
                                        <xsl:value-of select="/Filiere_Niveau/Student[1]/FirstName "/>
                                    <xsl:value-of select="/Filiere_Niveau/Student[1]/LastName"/> de CNE
                                    <xsl:value-of select="/Filiere_Niveau/Student/@CNE"/></fo:block>
                                </fo:inline>
                            </fo:block>
                            <fo:block>
                                <xsl:text>&#xA0;</xsl:text>
                            </fo:block>
                            <fo:block>
                                <xsl:text>&#xA0;</xsl:text>
                            </fo:block>
                            <fo:block>
                                <fo:inline font-size="10pt">
                                    <fo:block text-align="left">
                                        <fo:block>
                                            <fo:inline font-size="12pt">
                                                <xsl:text>a suivi et terminé la formation :</xsl:text>
                                            </fo:inline>
                                        </fo:block>
                                    </fo:block>
                                </fo:inline>
                            </fo:block>
                            <fo:block>
                                <xsl:text>&#xA0;</xsl:text>
                                                                                     C:\Users\Elitebook\Documents\projet_xml\
                            </fo:block>
                                                                                     3_publication_des_pages_html\Notes.xsl - Notepad++
                            <fo:block>
                                <fo:inline font-size="10pt">
                                    <xsl:value-of select="/Filiere_Niveau/@nom_de_filiere"/>
                                </fo:inline>
                            </fo:block>
```

## Document PDF généré:



Ecole National De Sciences Sppliques tanger le 08/02/2022

#### Attestation de réussite

je,soussigné(e) ,Monsieur Le directeur adjoint ,attesté que l'étudiant(e): chaymaeGhazide CNE KB23456

a suivi et terminé la formation :

GINF2

signature Du Directeur Adjoint

Attestation en Date 08/02.2022



XML to PDF by RenderX XEP XSL-FO Formatter, visit us at http://www.renderx.com/

## 5. Elaboration des listes des groupes de TPs :

### Groupe1\_tp.xquery

```
kquery version "1.0";

for $y in doc(".../1_conversion_de_docs_excel_en_xml_java/Student_GINF2.xml")/Filiere_Niveau
let $s := count($y/Student) idiv 2
for $x in (1 to $s)
return $y/Student[$x]
```

### Groupe2\_tp.xquery

```
xquery version "1.0";
for $y in doc("../1_conversion_de_docs_excel_en_xml_java/Student_GINF2.xml")/Filiere_Niveau
let $s := (count($y/Student) idiv 2) + 1
let $t := count($y/Student)
for $x in ($s to $t)
return $y/Student[$x]
```

### Documents XML généré:

```
<?xml version="1.0" ?>
<Filiere_Niveau nom_de_filiere ="GINF2_tp1">
<Student CNE="KB23456">
      <FirstName>chaymae</FirstName>
      <LastName>Ghazi</LastName>
      <BirthDate>01/01/2000</BirthDate>
      <PhoneNum>60000001</PhoneNum>
      <Email>nom1@gmail.com</Email>
    </Student><Student CNE="KB23457">
      <FirstName>hasnae</FirstName>
      <LastName>Yahyawi</LastName>
      <BirthDate>02/01/2000</BirthDate>
      <PhoneNum>60000002</PhoneNum>
      <Email>nom2@gmail.com</Email>
    </Student><Student CNE="KB23458">
      <FirstName>soumaya</FirstName>
      <LastName>Bssillat</LastName>
      <BirthDate>03/01/2000</BirthDate>
      <PhoneNum>600000023</PhoneNum>
      <Email>nom3@gmail.com</Email>
    </Student><Student CNE="KB23459">
      <FirstName>mohammed</FirstName>
      <LastName>Ben ali</LastName>
      <BirthDate>04/01/2000</BirthDate>
      <PhoneNum>600000024</PhoneNum>
      <Email>nom4@gmail.com</Email>
    </Student><Student CNE="KB23460">
      <FirstName>hichame</FirstName>
      <LastName>Yajour</LastName>
      <BirthDate>05/01/2000</BirthDate>
      <PhoneNum>60000025</PhoneNum>
      <Email>nom5@gmail.com</Email>
    </Student><Student CNE="KB23461">
      <FirstName>abd el illah</FirstName>
      <LastName>Hadraf</LastName>
      <BirthDate>06/01/2000</BirthDate>
      <PhoneNum>600000026</PhoneNum>
      <Email>nom6@gmail.com</Email>
    </Student><Student CNE="KB23462">
      <FirstName>abd samad</FirstName>
      <LastName>Kaabi</LastName>
      <BirthDate>07/01/2000</BirthDate>
      <PhoneNum>600000027</PhoneNum>
```

```
<?xml version="1.0"?>
<Filiere_Niveau nom_de_filiere="GINF2_tp2">
- <Student CNE="KB23463">
      <FirstName>souaad</FirstName>
       <LastName>Ziyach</LastName>
      <BirthDate>08/01/2000</BirthDate>
      <PhoneNum>600000028</PhoneNum>
       <Email>nom8@gmail.com</Email>
   </Student>
   <Student CNE="KB23464">
      <FirstName>yahya</FirstName>
       <LastName>Ben atiya</LastName>
       <BirthDate>09/01/2000</BirthDate>
      <PhoneNum>60000031</PhoneNum>
      <Email>nom9@gmail.com</Email>
   </Student>
   <Student CNE="KB23465"
      <FirstName>siraj</FirstName>
       <LastName>Hadad</LastName>
      <BirthDate>10/01/2000</BirthDate>
<PhoneNum>60000018</PhoneNum>
       <Email>nom10@gmail.com</Email>
   </Student>
   <Student CNE="KB23466">
      <FirstName>jamila</FirstName>
<LastName>Fajr</LastName>
       <BirthDate>11/01/2000</BirthDate>
      <PhoneNum>60000009</PhoneNum>
       <Email>nom11@gmail.com</Email>
   </Student>
   <Student CNE="KB23467"
       <FirstName>ishaa</FirstName>
      <LastName>Hakimi</LastName>
       <BirthDate>12/01/2000</BirthDate>
       <PhoneNum>60000003
      <Email>nom12@gmail.com</Email>
   </Student>
   <Student CNE="KB23468">
       <FirstName>fayrouz</FirstName>
       <LastName>Hadadi</LastName>
       <BirthDate>13/01/2000</BirthDate>
      <PhoneNum>60000004</PhoneNum>
       <Email>nom13@gmail.com</Email>
   </Student>
   <Student CNE="KB23469">
       <FirstName>joumana</FirstName>
       <LastName>Ben charki</LastName>
       <BirthDate>14/01/2000</BirthDate>
       <PhoneNum>60000005
      <Email>nom14@gmail.com</Email>
   </Student>
</Filiere Niveau>
```

✓ Pour diriger I output d xquery vers les fichiers groupe1.xml Et grpe2.xm;

