



# Malaysia Abilympics Competition

## 3. Data Processing – Basic Course

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## A. REQUIREMENTS





- All desk computers will be equipped with an AZERTY keyboard. However, contestants can install their own keyboard before the beginning of the competition.
- The jury will collect all electronic means of communication contestants may have (Cell phone, tablet computers...) at the beginning of the competition. They will be returned to their owners once the competition is finished.
- Contestants will not have access to the Internet and may not use equipment of software other than that provided by the organization. Any contestant caught cheating, talking to someone from the public or using a communication device will suffer a penalty of 5 points for the first transgression. A second transgression will lead to an exclusion from the contest.
- Contestants will save their work on an USB flash drive and hand it to the jury for evaluation.

## B. PROCEDURE

- Contestants will be welcomed on the stand Data Processing - Basic Course by members of the jury. A briefing about the organization of the competition and the safety rules will be arranged.
- Contestants will have 15 minutes before the beginning of the competition to verify the provided equipment and/or install their own.
- The jury will not take account of any problem coming from contestants' personal equipment.

## C. LIST OF THE PROVIDED EQUIPMENT

*Non-exhaustive list.*

No.	Equipment	Specifications	Qty per contestant	Notes
1	HP computer, 17-inch screen, keyboard and mouse		1 set	
2	Microsoft Access 2010		1	
3	Work table		1	
4	Chair		1	

## D. LIST OF TOOLS TO BE BROUGHT FOR EACH CONTESTANT

No.	Tool	Photo	Qty	Notes
1	Personal keyboard and mouse		1	Other than AZERTY (optional)

2	Personal case pencil		1	Contestant's choice
3	Special equipment needs		1	Specific to each contestant's handicap

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## E. FINAL TASK ASSIGNMENT

### I. Introduction

This project aims at preselecting candidates for the purpose of forming the French team for the 9th International Abilympics.

You will have 2 hours to complete it.

### II. Description of the project

The project is to be completed using the relational DBMS (Database Management System) Microsoft Access 2010 and a preexisting database containing tables, relations and data.

You will create an app for processing French applications to the 9th International Abilympics organized by the association.

The various skills in competition are professional skills (pottery, cooking, computer programming, welding, jewelry...) that are evaluated during this competition. They are assembled in general skill categories (Craft, ICT, Services...).

Candidates can only register to a single skill in competition.

In this app, applications can be in 3 statuses: when a candidate registers, his application is "Pending". Then, after his application has been evaluated, it is either "Accepted" if the candidate possesses enough experience in the chosen skill, or "Refused".

The list of accepted applications will be used later in order to select members of the French team.

#### 1. Main expected features

- Processing skills per skill category,
- Processing the list of candidates and the chosen skill,
- Processing a candidate's form in which the chosen skill is displayed,
- Listing the accepted applications per skill,
- Editing the skills in competition and the related general skill category,
- Editing the list of candidates per general skill category and the chosen skill.

### III. Skills Evaluation

Below are the skills you will use during the competition, as well as the matching scoring scale.

No.	Evaluation Criteria	Scoring scale
1	Editing field properties in existing tables	10
2	Defining relationships and referential integrity rules between tables	5
3	Inputting and editing data	15
4	Creating a query	10
5	Creating forms	35
6	Creating a report	25
<b>TOTAL POINTS</b>		<b>100</b>

All these tasks will be described in the following chapter. Each completed task must be conform to the given instructions.

#### IV. Database to use

As a reminder, you will begin the project with a preexisting database (file) named “**CandidateAdministration**” to which you will add edits (tables, relationships and data) as well as inputs (data, queries, forms and reports).

It contains 3 tables (with data):

1. General skill categories: Craft, ICT, Services...
2. Skills in competition: Pottery, cooking, computer programming, welding, jewelry...
3. Candidates with the chosen skill.

The relationships between tables are the following:

1. One general skill category can contain from 0 to several skills,
2. One skill only belongs to a single general skill category,
3. One skill in competition can contain from 0 to several candidates,
4. One candidate can only register to a single skill in competition.

#### V. Tasks to perform

##### 1. Tables and fields

The tables of the preexisting database are described in the following chapters A, B, and C. Each field (lines) and its properties (columns) are described in the chart pertaining to each table.

After opening the “**CandidateAdministration**” database, you must verify that the properties “data type” and “” of each field are conform to the description given for each table.

The columns “Constraint / field properties” and “Description” are for information only and do not require editing.

##### A. General skill categories – 2 points

Skill families containing the skills to be evaluated during the competition.

Name of the table: **SkillCategory**

Description of the table:

Field name	Data type	Caption	Constraints / field properties	Description
pnlCat	Number Long integer	Id	Primary key	Id for the general skill category
tCat	Text (25)	Skill category	Not null, No duplicates	Name of the skill category

##### B. Skills – 4 points

Skill contests to be evaluated during the competition.

Name of the table: **Skill**

Field name	Data type	Caption	Constraints / field properties	Description
ptSki	Text (3)	Code	Primary key	Code of the skill
tSki	Text (80)	Skill	Not null, No duplicates	Name of the skill
nlCatSki	Number Long integer	Skill category	Foreign key, Not null, Indexed with duplicates.  Listing the sorted general skill categories.	General skill category

**C. Candidates – 6 points**

Persons having presented an application to the 9th International Abilympics with the chosen skill and the status of the decision.

Name of the table: **Candidate**

Field name	Data type	Caption	Constraints / field properties	Description
pnICan	Number Long Integer	Id	Primary key	Id of the candidate
tTitleCan	Text (8)	Title	Default values = "Mr.", Not null, Indexed with duplicates. Combo box limited to "Mr." and "Ms."	Title of the candidate (Mr., Ms.)
tSurnameCan	Text (50)	Surname	Not null, Indexed with duplicates. Edit the format in order to have all characters in capital letters.	Surname of the candidate
tFirstNameCan	Text (50)	First name	Not null	First name of the candidate
tAddressCan	Text (70)	Address		Address of the candidate
tPostcodeCan	Text (5)	Postcode		Postcode of the candidate's city
tCityCan	Text (60)	City		City of the candidate
dBirthdayCan	Date	DoB		Date of birth of the candidate

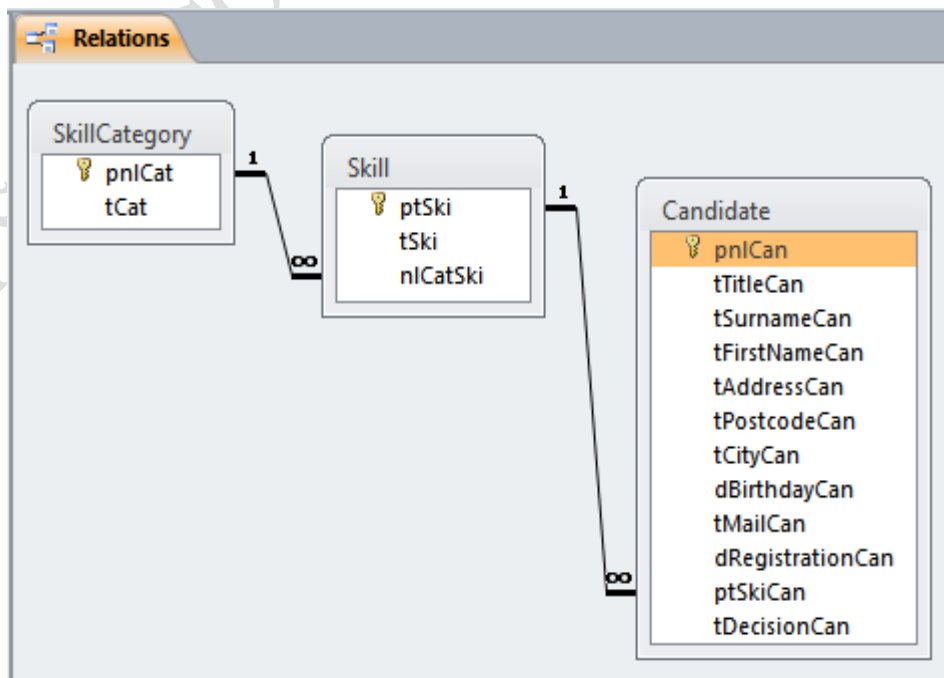
tMailCan	Text (50)	Mail	Not null	Email address of the candidate
dRegistrationCan	Date	Registration	Not null	Day of the candidate's registration
ptSkiCan	Text (3)	Chosen contest	Foreign key, Not null.  Combo box displaying the sorted skill names.	Code (name) of the contest (skill in competition) chosen by the candidate
tDecisionApp	Text (8)	Decision	Not null, default value "Pending", Indexed with duplicates. Combo box limited to "Pending", "Accepted", and "Refused".	Decision / status of the application (Pending, Accepted, Refused)

## 2. Relationships and referential integrity rules – 3 points

As a reminder, the relationships between the three tables are the following:

1. One general skill category can contain from 0 to several skills,
2. One skill only belongs to a single general skill category,
3. One skill in competition can contain from 0 to several candidates,
4. One candidate can only register to a single skill in competition.

Physical model:



You must edit the relationships between tables so that the physical data model is integrated and so that it corresponds with the 4 above constraints.

To do this, you will add the missing relationship with referential integrity and cascade update the related fields.

### 3. Data

You will find below the necessary information in order to edit and input data in the tables.

#### A. General skill categories – 3 points

Make the necessary edits so that the data in the table matches the following list:

Id	Name
1	Craft
2	Food
3	Industry
4	ICT
5	Services



**B. Candidates – 12 points**

Input the following data in the “Candidate” table :

Id	Title	Surname	First Name	Address	Post code	City	DoB	Mail	Registration	Chosen contest	Decision
135	Mr.	THOMAS	Jose	Route d'Aureille	34290	SERVIAN	1972/05/04	thomas.jose@laposte.net	2015/01/12	V47 – Jewelry	Accepted
136	Mr.	PERROT	Philippe	82 Bd Rodin	30100	ALES	1973/08/01	perrot.philippe@wanadoo.fr	2014/09/03	V02 – Cabinet making (Advanced course)	Refused
137	Mr.	BLIN	Laurent	1 rue des 2 Freres	89100	SENS	1965/03/28	blin.laurent@laposte.net	2015/01/2014	V06 – Floral arrangement	Refused

#### 4. Queries

##### A. List of accepted applications by skill category – 10 points

In order to monitor applications to skill contests, you must create a query listing candidates whose application has been accepted. This list will contain, in columns, the chosen contest, the title, the surname, the first name and the email address of the candidate.

Each column will be resized so as to display the entirety of its content.

You will name this query "**qAcceptedCandidateByContest**", and its content will correspond to the following excerpt:

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qAcceptedCandidateByContest				
Chosen contest	Title	Surname	First Name	Mail
V01 - Basket Making	Monsieur	BARTHEL	Anthony	barthel.anthony@yahoo.fr
V01 - Basket Making	Madame	BEYNEY	Virginie	beyney.virginie@gard.chambagri.fr
V01 - Basket Making	Monsieur	CHAOUCH	Souhael	chaouch.souhael@voila.fr
V02 - Cabinet Making (Advanced course)	Madame	ARGELIES	Catherine	argelies.catherine@net-up.com
V02 - Cabinet Making (Advanced course)	Madame	BIDAUD	Aude	bidaud.aude@lemel.fr
V02 - Cabinet Making (Advanced course)	Madame	CATUSSE	Cecile	catusse.cecile@wanadoo.fr
V02 - Cabinet Making (Advanced course)	Monsieur	GAULLET	Sofiane	gaullet.sofiane@orange.fr
V02 - Cabinet Making (Advanced course)	Monsieur	GUINTINI	Nicolas	guintini.nicolas@laposte.net
V02 - Cabinet Making (Advanced course)	Monsieur	ORTIZ	Sébastien	ortiz.sebastien@aol.com
V02 - Cabinet Making (Advanced course)	Monsieur	PAWLOWSKI	Sylvain	pawlowski.sylvain@laposte.net
V02 - Cabinet Making (Advanced course)	Madame	VERDUN	Audrey	verdun.audrey@laposte.net
V02 - Cabinet Making (Advanced course)	Monsieur	VERNHES	Jérôme	vernhes.jerome@free.fr
V04 - Crochet Work	Monsieur	PETROV	Dimitri	petrov.dimitri@free.fr
V05 - Embroidery	Madame	BLANQUET	Joëlle	blanquet.joelle@tiscali.fr
V08 - Landscape Gardening (Group of 2)	Madame	COURAL	Pascale	coural.pascale@chevriot.com
V08 - Landscape Gardening (Group of 2)	Monsieur	GONZALEZ	Jean-Marc	gonzalez.jean-marc@laposte.net
V08 - Landscape Gardening (Group of 2)	Monsieur	SAINTPIERRE	Philippe	saintpierre.philippe@laposte.net
V09 - Painting	Madame	BATISSON	Mariane	batisson.mariane@voila.fr
V09 - Painting	Madame	CASTELLARIN	Nathalie	castellarin.nathalie@hotmail.fr
V10 - Pottery	Monsieur	CARQUILLE	Michel	carquille.michel@experian.fr
V10 - Pottery	Monsieur	DELAMARRE	François-Pierre	delamarre.fp@laposte.net
V10 - Pottery	Monsieur	MICHAUD	Jean-Stéphane	michaud.js@free.fr
V11 - Silk Painting	Monsieur	BERNAD	Xavier	bernad.xavier@laposte.net
V11 - Silk Painting	Madame	BRUNO	Marie	bruno.marie@tiscali.fr
V11 - Silk Painting	Monsieur	TOUCAS	Nicolas	toucas.nicolas@wanadoo.fr
V12 - Waste Reuse	Madame	CAMOU	Sonia	camou.sonia@laposte.net
V12 - Waste Reuse	Monsieur	JULLIEN	Thierry	jullien.thierry@laposte.net
V13 - Wood Carving	Monsieur	DEVILLE	Olivier	deville.olivier@voila.fr

## 5. Forms

### A. List of candidates by skill contest – 10 points

You will create a new list form allowing the management of candidates per chosen contest (consulting, editing, adding and removing).

This list will be displayed as a data sheet with the following columns: the chosen contest, the day of registration, the status of the application, the title, the surname, the first name and the email of the candidate. The columns will be sized so as to display their respective content.

Furthermore, it will be sorted by ascending alphabetical order by: chosen task, surname and first name.

You will name this form "**fCandidateListBySkill**".

Its content and its formatting will correspond to the following excerpt:

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Chosen contest	Registration	Decision	Title	Surname	First Name	Mail
V15 - Cooking	2015/02/02	Refused	Monsieur	ORAZZO	Marcel	orazzo.marcel@laposte.net
V15 - Cooking	2015/01/27	Accepted	Monsieur	PEYRE	Thierry	peyre.thierry@gmail.com
V16 - Restaurant Service	2015/02/17	Accepted	Madame	CARRIERE	Myriam	carriere.myriam@orange.fr
V16 - Restaurant Service	2015/01/27	Pending	Madame	MILHORAT	Erica	milhorat.eric@laposte.net
V17 - Administration and Management of Network Systems	2015/01/27	Accepted	Monsieur	ALTIMANI	Christophe	altimani.christophe@laposte.net
V17 - Administration and Management of Network Systems	2015/01/06	Accepted	Monsieur	FUSELLIER	Luc	fusellier.luc@wanado.fr
V17 - Administration and Management of Network Systems	2015/01/14	Accepted	Monsieur	MERCERON	Ludovic	merceron.ludovic@caramail.com
V17 - Administration and Management of Network Systems	2015/01/12	Pending	Monsieur	RAYNAUD	Patrice	raynaud.patrice@tele2.fr
V18 - Character Design	2015/02/20	Pending	Madame	KERMARREC	Alice	kermarrec.alice@wanadoo.fr
V18 - Character Design	2015/01/13	Accepted	Monsieur	LEGER	Philippe	leger.philippe@aol.com
V18 - Character Design	2015/02/17	Pending	Monsieur	MONTES	David	montes.david@laposte.net
V19 - Computer Assembly	2015/01/20	Refused	Monsieur	JORET	Patrick	joret.patrick@wanadoo.fr
V20 - Computer Programming	2015/02/23	Pending	Monsieur	BOCENNO	Laurent	bocenno.laurent@laposte.net
V20 - Computer Programming	2015/01/30	Pending	Monsieur	FALBET	Thierry	falbet.thierry@laposte.net
V21 - Creating Web Pages	2015/01/12	Accepted	Monsieur	ODOARD	Patrice	odoard.patrice@wanadoo.fr
V21 - Creating Web Pages	2015/02/02	Pending	Monsieur	TORDOIR	Luc	tordoir.luc@laposte.net
V22 - Data Processing (Advanced Course)	2015/01/26	Accepted	Madame	BOISSEAU	Léa	boisseau.lea@sfr.fr
V22 - Data Processing (Advanced Course)	2015/01/15	Accepted	Monsieur	CARVALHO	Cyrille	carvalho.cyrille@laposte.net
V23 - Data Processing (Basic Course)	2015/02/25	Pending	Madame	VIGNES	Patricia	vignes.patricia@yahoo.fr
V23 - Data Processing (Basic Course)	2015/01/23	Accepted	Monsieur	VUCH	Christophe	vuch.christophe@gmail.com
V25 - E-Sport	2015/01/15	Accepted	Monsieur	ARCHENAUT	Patrick	archenault.patrick@freesbee.fr
V25 - E-Sport	2015/01/26	Accepted	Monsieur	ARNAL	Yannis	arnal.yannis@laposte.net
V25 - E-Sport	2015/03/03	Accepted	Monsieur	BAYARD	Christophe	bayard.christophe@free.fr
V25 - E-Sport	2015/02/19	Pending	Monsieur	BURLAND	Michel	burland.michel@gmail.com
V25 - E-Sport	2015/01/30	Accepted	Monsieur	CADALEN	Yves	cadalen.yves@gmail.com
V25 - E-Sport	2015/02/25	Pending	Monsieur	GONSIOR	Dominique	gonsior.dominique@hotmail.com
V26 - Photography Outdoor	2015/01/07	Accepted	Monsieur	HOT	Olivier	hot.olivier@qualinorm.com
V26 - Photography Outdoor	2015/01/16	Accepted	Monsieur	VEZINE	Fernand	vezine.fernand@hotmail.com
V27 - Photography Studio	2015/02/06	Accepted	Monsieur	BUMB	Valéry	bumb.valery@laposte.net
V27 - Photography Studio	2015/01/05	Accepted	Monsieur	PENA	Yves-Laurent	pena.ylt@free.fr
V27 - Photography Studio	2015/02/10	Pending	Monsieur	VILLAPRET	Yvann	villapret.yvann@passportformation.com

### B. Candidate sheet with chosen contest - 10 points

Create a single form allowing the management of each candidate.

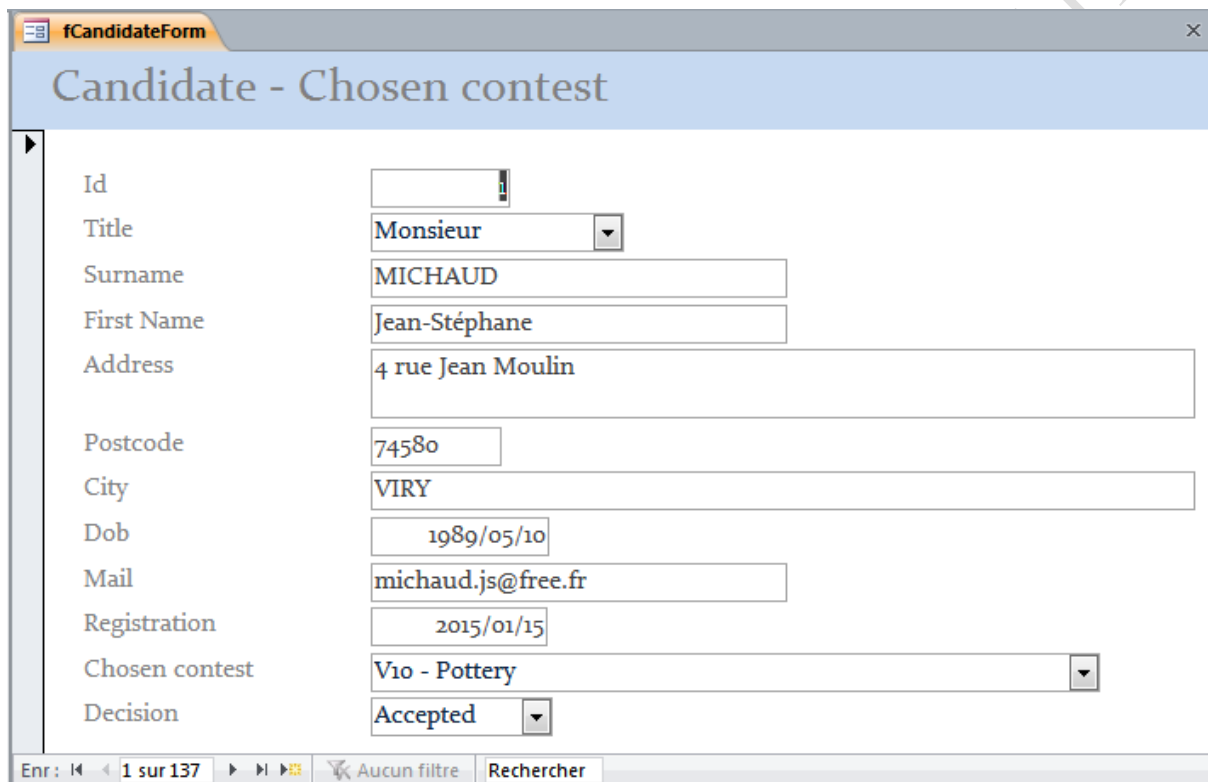
It will contain all of the information fields sorted by Id. The title "Candidate – Chosen contest" will be added to the top of the form.

Input zones will be sized so as to display the entirety of their content.

The form (at the top) title will be **Candidate – Chosen contest**.

You will name this form "**fCandidateForm**".

Its content and its formatting will be conform to the following model:



The screenshot shows a web browser window with the title "Candidate - Chosen contest". The form contains the following fields:

Id	<input type="text"/>
Title	<input type="text" value="Monsieur"/>
Surname	<input type="text" value="MICHAUD"/>
First Name	<input type="text" value="Jean-Stéphane"/>
Address	<input type="text" value="4 rue Jean Moulin"/>
Postcode	<input type="text" value="74580"/>
City	<input type="text" value="VIRY"/>
Dob	<input type="text" value="1989/05/10"/>
Mail	<input type="text" value="michaud.js@free.fr"/>
Registration	<input type="text" value="2015/01/15"/>
Chosen contest	<input type="text" value="V10 - Pottery"/>
Decision	<input type="text" value="Accepted"/>

At the bottom of the form, there is a navigation bar with the text "Enr : 1 sur 137", "Aucun filtre", and "Rechercher".

### C. General skill categories management and related skills – 15 points

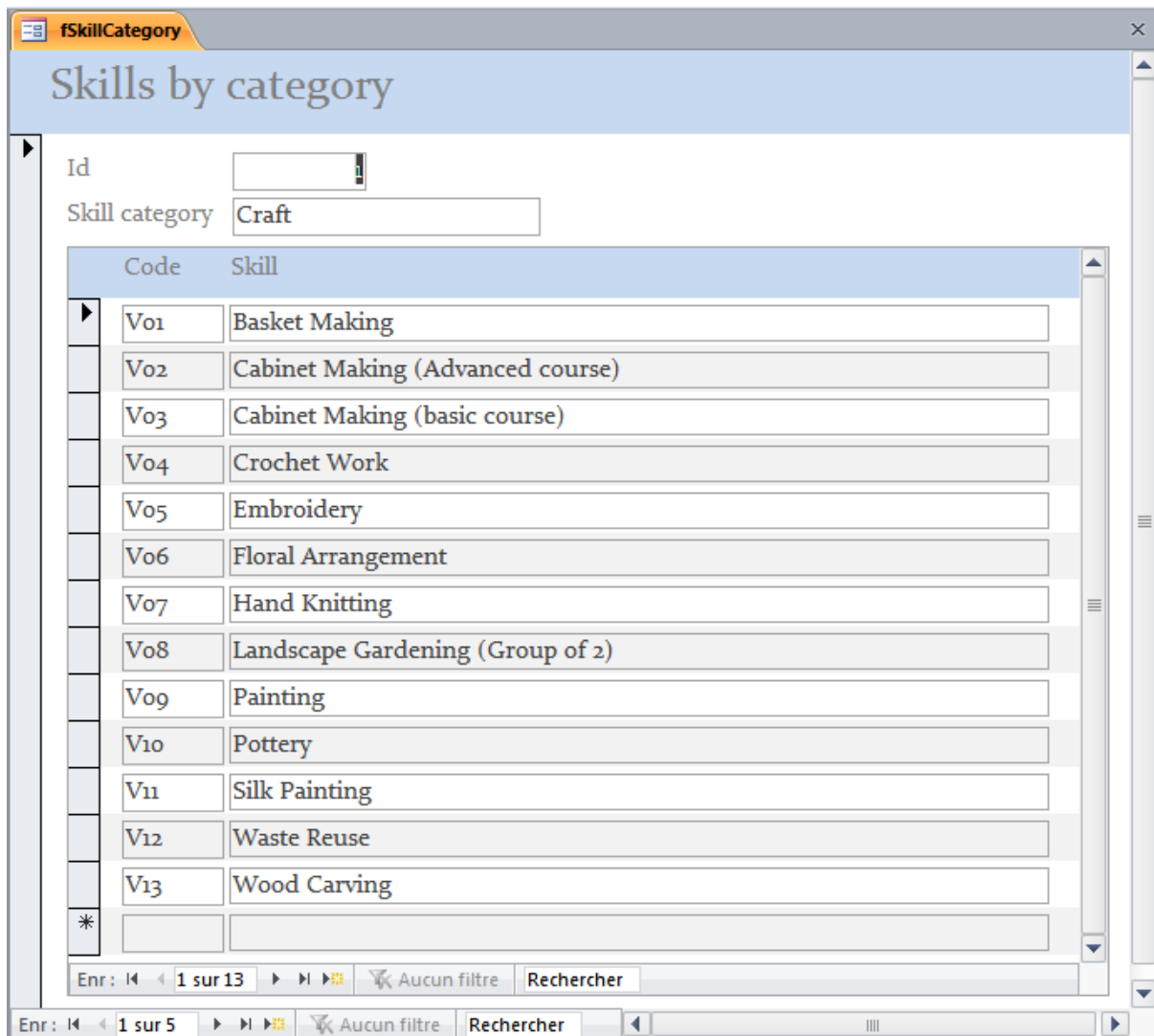
In order to simplify the inputting of general skill categories and of the related skills, you will create a form with sub-form.

The main form will be named "**fSkillCategory**" and will contain the Id and the name of each general skill category, sorted by ascending order.

The sub-form linked to the main form will be named "**fSkillCategorySfSkill**" and will display the complete list in tabular format of the skills for each general skill category, with the following columns: code and name of the general skill category.

The title (at the top) of the form will be **Skills by category**.

Its content and its formatting will be conform to the following model:



## 6. Snapshots

### A. Skills in competition – 10 points

You will create a snapshot listing skills in competition.

The snapshot will be displayed as a list in portrait layout, and will contain the following information:

- Skill code (sorted by),
- Name of the skill,
- Related general skill category.

Columns will be resized in order to display the entirety of their content.

The title (at the top) of the report will be **Skills in competition**.

You will name this report "rSkill" and make it conform to the following excerpt:

## Skills in competition

Code	Skill	Skill category
V01	Basket Making	Craft
V02	Cabinet Making (Advanced course)	Craft
V03	Cabinet Making (basic course)	Craft
V04	Crochet Work	Craft
V05	Embroidery	Craft
V06	Floral Arrangement	Craft
V07	Hand Knitting	Craft
V08	Landscape Gardening (Group of 2)	Craft
V09	Painting	Craft
V10	Pottery	Craft
V11	Silk Painting	Craft
V12	Waste Reuse	Craft
V13	Wood Carving	Craft
V14	Bakery (cake)	Food
V15	Cooking	Food
V16	Restaurant Service	Food
V17	Administration and Management of Network Systems	ICT

### B. List of applications by general skill categories and by skill – 15 points

You will create a report listing the status of applications sorted by name of general skill category and by skill code.

The report will be presented as a box in portrait layout and will contain the following information:

- Name of the general skill category (grouping by),
- Code of the skill (grouping by),
- The surname of the candidate (sorted by),
- The first name of the candidate (sorted by),
- The status of the application.

The title (at the top) of the report will be **List of candidates by category and contest**.

You will name this “**rCandidateByCategoryAndSkill**” and make it conform to the following excerpt:



## List of candidates by category and contest

Skill category	Code	Surname	First Name	Decision
Craft	Vo1	BARTHEL	Anthony	Accepted
		BERAUD	Bruce	Refused
		BEYNEY	Virginie	Accepted
Craft	Vo2	CHAOUCH	Souhael	Accepted
		ARGELIES	Catherine	Accepted
		BIDAUD	Aude	Accepted
		CATUSSE	Cecile	Accepted
		GAULLET	Sofiane	Accepted
		GUINTINI	Nicolas	Accepted
		ORTIZ	Sébastien	Accepted
		PAWLOWSKI	Sylvain	Accepted
		PERROT	Philippe	Refused
		VERDUN	Audrey	Accepted
Craft	Vo3	VERNHES	Jérôme	Accepted
		OFFRET	Jeanne	Pending
Craft	Vo4	GROCHE	Dominique	Pending
		MOREAU	Cyrille	Refused

**Well done!**

**You're almost finished!**

Please save your finished database on your workstation and on a USB flash drive that you will give to the judge.

**CONGRATULATIONS!**  
**Thank you for your participation!**