LaSalle College
Montréal

Midterm Evaluation: 30%

Course Identification

Name of program(s) – Code(s):   INFORMATION TECHNOLOGY PROGRAMMER
ANALYST (LEA.3Q)
COMPUTER SCIENCE

Course title: IOS MOBILE DEVELOPMENT I

Course number: 420-DM3-AS   420-DM5-AS

Teacher's name: Daniel de R B Carvalho

Duration: 3 hours

Semester: Fall 2023

Student Identification

Name: _____   Date: _____

Student number: _____   Group number: **07294**   Result: _____

☐ I declare that this is an original work, and that I credited all content sources of which I am
not the author (online and printed, images, graphics, films, etc.), in the required quotation and
citation style for this work.

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Standard of the Evaluated Competencies

Statement of the evaluated competency – Code

Develop native applications without a database -00SR

Evaluated elements of the competencies

1. Analyze the application development project.
2. Generate or program the graphical interface.
3. Program the application logic.

Competency: Develop native applications without a database-00SR General ministerial and institutional performance criteria: – Methodical, analytic and synthetic mind; – Programming efficiency; – Autonomy; – Initiative;	
Elements of the competency **420.BP (1-2-4 only)**	**Performance criteria specific to each element**
1. Analyze the application development project.	1.1 Accurate analysis of design documents 1.2 Proper identification of tasks to be carried out.
3. Generate or program the graphical interface.	3.1 Appropriate choice and use of graphic elements for display and input 3.2 Proper integration of images 3.3 Adaptation of the interface based on the display format and resolution
4. Program the application logic	4.1 Proper programming of interactions between the graphical user interface and the user 4.2 Proper programming of communications between the peripheral devices and the software functions of the target platform 4.3 Effective use of execution threads 4.4 Proper integration of sounds and videos 4.5 Proper application of internationalization techniques 4.6 Precise application of secure coding Techniques

Instructions

- Your exam must be submitted by uploading your project via Omnivox. Deadlines are shared on Omnivox in the assignment box and must be respected.

- Submit a compressed file with your project file and folder.

- Plagiarism, attempts at plagiarism or complicity in plagiarism during a summative evaluation results in a mark of zero (0). In the case of recidivism, in the same course or in another course, the student will be given a grade of '0' for the course in question. (IPEL – Article 5.16).

Mark Breakdown

This evaluation is on 100 points, distributed as follows:

Question 1   100 points

                                                              TOTAL: **100 POINTS**

Question 1

Company ABC is developing a simple application to manage employees' tasks.

The first development phase was finished, but some issues were found by the Product Owner and validation team.

Your task is to follow the issue report and fix those issues.

IMPORTANT: You have to work with the source code given to your group. Using another source code means plagiarism, and your work will be graded with a zero for the course. (IPEL – Article 5.16).

ISSUES REPORT

□ #1	10 pts	**ViewController**: Password field not well implemented

□ The password field is showing its content (should be masked).

□ The eye button is not working. It should reveal the masked password while the user **holds the button down**.

□ #2	20 pts	**ViewController**: Login validation is missing

□ You should use the UserModel and UserProvider to verify the user credentials. The login is authorized only for the users stored on UserProvider.allUsers. When searching for the user credentials, make sure that you are matching case insensitive strings for the User.username attribute.

□ You must use the Toast message to inform the user when something is wrong (missing fields, user not found, invalid credentials, etc).

□ #3	10 pts	**MainViewController**: lblUsername not showing the logged username

□ When the user is logged in, the lblUsername should present a welcome message. The first letter of each username should be capitalized.

E.g.: Hello Daniel Carvalho   (capitalized D and C).

□ **#4**	25 pts	**MainViewController**: TableView not implemented

□ The tableView object is connected to the MainViewController but the delegate and datasource protocols functions were not implemented. Your job is to implement the functions:

tableView (… numberOfRowsInSection …)

tableView (… cellForRowAt …)

tableView(… didSelectRowAt …)

□ **#4**	25 pts	**MainViewController**: Show only completed tasks switch not implemented

□ A UISwitch named swShowOnlyTasksDone were placed on MainViewController but it is not implemented. This feature should perform a filter based on task done attribute, reloading the tableView data to present only the objects matching this criteria. When the swShowOnlyTasksDone is OFF, you should present all tasks (done and undone).

An event to get the action of user changing its state is already connected through the function *@IBAction func swShowOnlyTasksDoneChanged (… …).*

□ **#6**	10 pts	Review the code

Before delivering your code, make sure it is clear, readable and organized.

□ Use good variable and function names.

□ Organize your classes. Make sure your have attributes and outlets first and then functions.

□ Make sure your code is well indented.

Correction Grid

Elements of the competency:
- 00SR : 1. Analyze the application development project.
  Performance criterion:
  - 1.1 Accurate analysis of design documents
  - 1.2 Proper identification of tasks to be carried out.

- 00SR : 3. Generate or program the graphical interface.
  Performance criterion:
  - 3.1 Appropriate choice and use of graphic elements for display and input
  - 3.2 Proper integration of images
  - 3.3 Adaptation of the interface based on the display format and resolution.

- 00SR : 4. Program the application logic.
  Performance criterion:
  - 4.1 Proper programming of interactions between the graphical user interface and the user
  - 4.2 Proper programming of communications between the peripheral devices and the software functions of the target platform
  - 4.3 Effective use of execution threads
  - 4.4 Proper integration of sounds and videos
  - 4.5 Proper application of internationalization techniques
  - 4.6 Precise application of secure coding Techniques

Criterion-elements:

Proper UI design following instructions and applying practices taught in class.

UI objects outlet connections following good practices and standards (well defined names).

Proper use of Segue and its enum file to safely handle identifiers.

Fields validation following the defined criteria. Well-defined messages and instructions when validating user input.

The correct use of Segue (shouldPerform, Perform) for validation and for sending data to another controller.

Use of variables, classes, interfaces and function names following standards. Clear, idented and organized code.

The correct connection between controller and user interface.

The correct implementation of Provider class for methods all, add, update, delete.

No syntax or compilation errors (application running).

No logic errors.

Correction Grid for Language

Clear communication	Clear communication most of the time	Vague communication	Unclear communication
- 0	- 0.5	- 1.5	- 2
(Word Choice) Use of precise and rich vocabulary	(Word Choice) Use of precise Vocabulary	(Word Choice) Use of imprecise Vocabulary	(Word Choice) Use of inappropriate vocabulary
- 0	- 0.5	- 1.5	- 2
(Format/Type of work) Respect of norms	(Format/Type of work) Respect of most of the norms	(Format/Type of work) Non-respect of the norms	(Format/Type of work) Inappropriate in relation to the required norms
- 0	- 0.5	- 1.5	- 2
(Linguistic Code) (≤2 mistakes/page)	(Linguistic Code) (3-7 mistakes/page)	(Linguistic Code) (8-10 mistakes/page)	(Linguistic Code) (>10 mistakes/page)
- 0	- 0.5 … - 2.5	- 2.5 … - 3.5	- 4