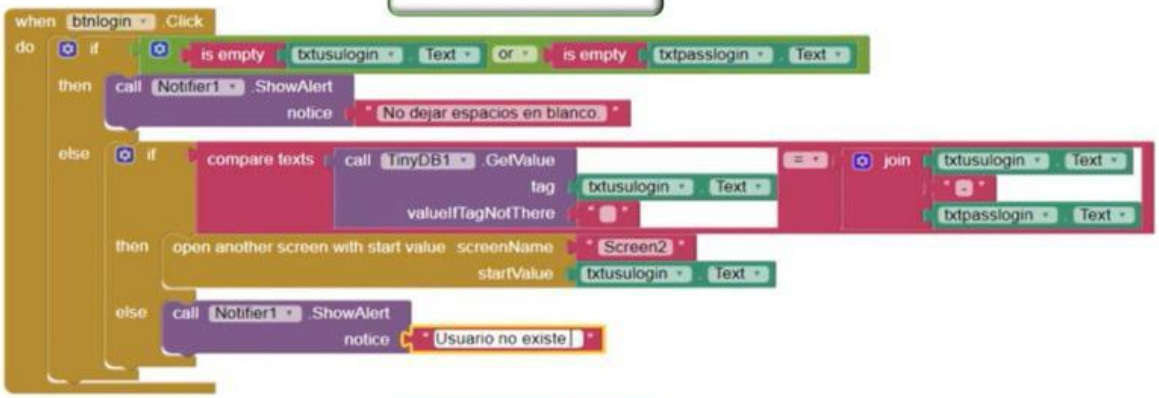
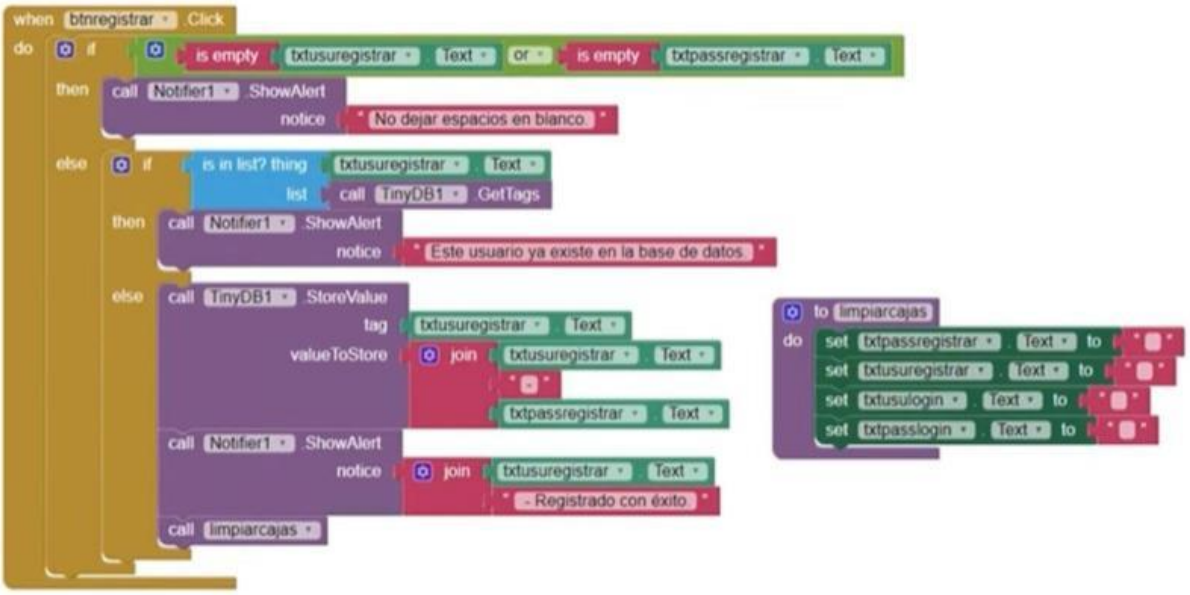
	MARIST BROTHERS OF THE SCHOOLS CHAMPAGNAT PASTO INSTITUTE	
	Name:	Date: July, 2026
	Grade: 8th	Term: 3rd
	Area/ Subject: Technology and computing	Mark:

Purpose: I apply database concepts to solve application programming problems that I have worked on with AppInventor.

LOGIN BUTTON



REGISTER BUTTON



LIVEWORKSHEETS

Evaluative Activity: Database and AppInventor

1. When registering in the app, a student types the word "fourteen" in the age field. The system shows an error because the database needs a number (14). What data types caused this error?

- ☐ *The system needed a Boolean and the user entered a Number.*
- ☐ *The system needed a Table and the user entered a Column.*
- ☐ *The system needed a Number and the user entered a String.*

*2. Students test the **Login button**. They type their information and press the button. However, when they restart the app, the data disappears. In their code, they only programmed this: WHEN Button_Login.Click DO: SET txt_username. Text TO " ". What is the logical mistake?*

- ☐ *They forgot to use the CALL TinyDB.StoreValue block to save the data before clearing the screen.*
- ☐ *The button needs the name Button_login to activate the cloud*
- ☐ *They configured the PasswordTextBox property backwards*

3. Students discover a problem: if they type an incorrect password or leave the field empty, the app still opens the Main_Screen. To fix this security problem, the button blocks must:

- ☐ *Open the other screen immediately without checking anything*
- ☐ *Use an IF block to check if the entered password is equal (==) to the password saved in the TinyDB.*
- ☐ *Change the database for a simple text component.*

4. A team designs beautiful screens with buttons and texts. However, when they type information, the data is not saved in the TinyDB. The teacher explains that the user interface and the database are separate. How do they communicate?

- ☐ *Databases only work if the lab computer is turned off.*
- ☐ *The database saves everything on the screen automatically.*
- ☐ *Visual components capture the data, but you need an action block to save it into the database.*

5. For a school cafeteria app, students need to save two things: a list of food with prices, and a list of students with unpaid debts. How should they organize this information in the database?

- ☐ *Each different category of information must have its own independent Table.*
- ☐ *Food prices must be saved as Boolean variables in the students' Table.*
- ☐ *All school information must be saved in one single infinite Row.*

LIVEWORKSHEETS

6. *When creating the input field for parents' phone numbers (for example: +57 3157771234), the programmers debate if the data type should be Number or String. What is the correct choice?*

- [ ] *Number, because the computer needs to add and multiply the phone numbers.*
- [ ] *Boolean, because the phone number only shows if they answer (True) or not (False).*
- [ ] *It does not need a data type because phones delete numbers instantly.*

7. *The quality inspector notes that if a user leaves the fields empty and presses btn_login, the app looks for a blank username and fails. To fix this, the code must:*

- [ ] *Change the screen color to show there is no text.*
- [ ] *Use an IF conditonal with the is empty block to check for text before validating the login.*
- [ ] *Delete the btn_login button and let users enter without registering.*

8. *The team programmed the message that appears when someone types an incorrect password. The current text says: "ERROR CODE 404 - SYSTEM BLOCKS REJECTED". Following good design, which message is the most appropriate?*

- [ ] *"Hey! You broke the app, don't touch the buttons again."*
- [ ] *"Access Denied. Please verify your username and password."*
- [ ] *"Incorrect Data. Go back to the registration screen and delete your account."*

9. *If a new student uses your app to register, does your system create a new Row, a new Column, or a new Table?*

- [ ] *A new Row, because a new user is a new record with their own username and password.*
- [ ] *A new Table, because every person needs an independent file to save their data.*
- [ ] *A new Column, because the system needs to add a new category for the new student*

10. *In a database table, what is the correct description for* ***Columns*** *and* ***Rows****?*

- [ ] ***Columns*** *are vertical (⬆ ⬇) categories like Username, and* ***Rows*** *are horizontal (⬅ ➡) records of data.*
- [ ] ***Columns*** *are horizontal (⬅ ➡) records of data, and* ***Rows*** *are vertical (⬆ ⬇) categories.*
- [ ] *Columns and Rows are the exact same thing and they always look horizontal.*

LIVEWORKSHEETS