



Progress Report no. 4 Food Ordering System	
Course Code: CpE 201L	Program: Bachelor of Science in Computer Engineering
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Name: Catahan, Joshua Directo, Hannah Thea Eulin, Ryan Bertrand Gabijan, Rhovic Hermosura, Leigh	Instructor: Engr. Maria Rizette Sayo
1. Objectives	
<ul style="list-style-type: none">• To explore the libraries of Kivy module• Use text input in Kivy (from kivy.uix.textinput import TextInput)• Implementation of Kivy graphics in the program (from kivy.graphics import Color, RoundedRectangle)	
2. Discussion	
<p>The kivy.graphics is used for drawing instructions for rendering visual elements. This module is essential when the task needs a custom drawing and visual presentation. Custom drawings like lines, rectangles, ellipses, triangles, and meshes. This allows creating unique designs in your program. Text input, on the other hand, is like a GUI within the Kivy module where the user can input and edit text. In this report, we are in the log-in interface, so we use the graphics and text input. Text input will be used to store the personal information of the customer and staff, allowing their data not to be deleted when they re-log in. We were in the process of developing the back end of the program as well as how to implement the data structure into our program.</p>	
3. Materials and Equipment	
<ul style="list-style-type: none">• Desktop/Device: It is important to have a device so you can program• Operating System: Operating system are essential since you cannot use your device without it.• Python IDE: You may use Visual Studio Code or Pycharm	
4. Procedure	
<ul style="list-style-type: none">• We use and explore how to use the Kivy graphics and Text input.• We created class like RoundedButton and Staff_login, and add function to it so that we can draw out program	



- Import images so we can have logo, design, etc.
- Here's the code of our program.

```
from kivy.app import App
from kivy.ui.boxlayout import BoxLayout
from kivy.ui.floatlayout import FloatLayout
from kivy.ui.label import Label
from kivy.ui.image import Image
from kivy.ui.textinput import TextInput
from kivy.ui.button import Button
from kivy.graphics import Color, RoundedRectangle
from kivy.core.window import Window

Window.size = (1080/2, 2082/2)

class RoundedButton(Button):
    def __init__(self, **kwargs):
        super().__init__(**kwargs)
        self.background_normal = ""
        self.background_color = (0, 0, 0, 0)

        with self.canvas.before:
            self.canvas_color = Color(rgba=(1.0, 0.65, 0.0, 1.0))
            self.rect = RoundedRectangle(pos=self.pos, size=self.size, radius=[15])

        self.bind(pos=self.update_rect, size=self.update_rect)

    def update_rect(self, *args):
        self.rect.pos = self.pos
        self.rect.size = self.size

class Staff_Login(App):
    def build(self):
        self.window = FloatLayout()

        # Logo near the top
        self.logo = Image(
            source='DBMS (Project)\dbms pic\Kainmami.png',
            size_hint=(0.4, 0.2),
            pos_hint={'center_x': 0.5, 'top': 0.98}, # Stick close to top
            allow_stretch=True,
            keep_ratio=True
        )
```



```
self.window.add_widget(self.logo)

# Message label
self.sample = Label(
    text="",
    size_hint=(None, None),
    pos_hint={'center_x': 0.5, 'top': 0.78},
    font_size=18,
    color=[1, 1, 1, 1]
)
self.window.add_widget(self.sample)

# Email input
self.user = TextInput(
    hint_text="Enter your email",
    multiline=False,
    size_hint=(0.5, None),
    height=50,
    pos_hint={'center_x': 0.5, 'top': 0.70}
)
self.window.add_widget(self.user)

# Password input
self.password = TextInput(
    hint_text="Enter your password",
    multiline=False,
    password=True,
    size_hint=(0.5, None),
    height=50,
    pos_hint={'center_x': 0.5, 'top': 0.60}
)
self.window.add_widget(self.password)

# Login button
self.button = RoundedButton(
    text="Login",
    font_size=24,
    size_hint=(0.3, None),
    height=60,
    pos_hint={'center_x': 0.5, 'top': 0.5},
    bold=True,
    color=(0, 0, 0, 1)
)
```



```
self.button.bind(on_press=self.onButtonPress)
self.button.bind(on_release=self.onButtonRelease)
self.window.add_widget(self.button)

return self.window

def onButtonPress(self, instance):
    instance.canvas_color.rgb = (0.3, 0.3, 0.3, 1.0)
    instance.color = (1, 1, 1, 1)

def onButtonRelease(self, instance):
    instance.canvas_color.rgb = (1.0, 0.65, 0.0, 1.0)
    instance.color = (0, 0, 0, 1)
    self.callback(instance)

def callback(self, instance):
    email = self.user.text.strip()
    pwd = self.password.text.strip()
    if not email or not pwd:
        self.sample.text = "Please fill in all fields."
    else:
        self.sample.text = f"Hello, {email}!"

if __name__ == "__main__":
    Staff_Login().run()
```

5. Output

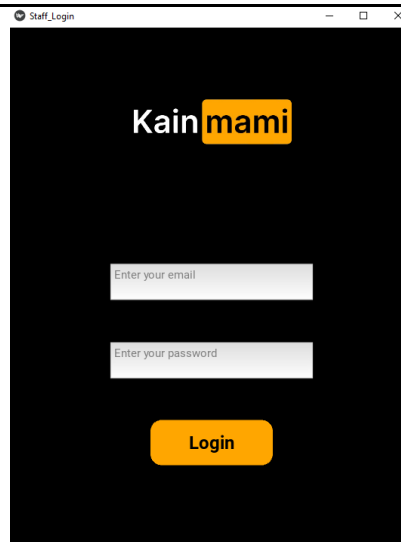


Figure 1.0 Output



The output of the program shows exactly what the kivy libraries we used, implementing its to our program. After that log in interface we will use the data of the customer and staff and store it to our database and accessing it using the Data structure so it become more convenient to the staff when they have orders.

6. Conclusion

In conclusion, the use of kivy,graphics and TextInput plays a crucial role developing out log in interface to make visually appealing to the customer. The kivy.graphics allow us to create a customized visual elements, such as shapes and layout, enhancing the overall user interface. Additionally, TextInput provides an efficient way to collect and store our user data, ensuring personal information for both customer and staff remains accessible. These components form the foundation of the program's front-end and data process, we are on going to develop the system's back end and data structure.