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## Факультет ИУ Кафедра ИУ5

## Курс «Основы информатики» Отчет по Лабораторной работе

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## Telegram bot с использованием кнопочного интерфейса и реализацией через библиотеку python-telegram-bot

#### **Code Realisation:**

```
from typing import Final
from telegram import Update, ReplyKeyboardMarkup,
ReplyKeyboardRemove, KeyboardButton
from telegram.ext import Application, CommandHandler,
MessageHandler, filters, ContextTypes
TOKEN: Final =
'7623110363: AAGyFDqqTAvTPoHms8wdABEFaWJUQ4xnBEo'
USERNAME: Final = '@bookmarks4sheron bot'
# Commands
async def start command(update: Update, context:
ContextTypes.DEFAULT TYPE):
    keyboard = [
        ['Hello', 'Help'],
['GitHub', 'Custom command']
    reply markup = ReplyKeyboardMarkup(keyboard,
resize keyboard=True)
    await update.message.reply_text('Terminal: <Status>
... Vault activated', reply_markup=reply_markup)
async def help_command(update: Update, context:
ContextTypes.DEFAULT TYPE):
    await update.message.reply_text('Terminal:
<Help> ... waiting for tasks ...')
async def custom_command(update: Update, context:
ContextTypes.DEFAULT TYPE):
```

```
await update.message.reply text('Terminal:
<Command> ...')
# Responses
def handle response(response: str) -> str:
    text: str = response.lower()
    if 'is anybody here?' in text:
        return '...Sound of silence...'
    elif text == 'help':
        return 'Terminal: <Help> ... waiting for
tasks ...'
    elif text == 'custom command':
        return 'Terminal: <Command> ...'
    elif text == 'github':
        return 'Github repo: https://github.com/Sheron-
Fate/Parsing '
    elif text == 'hello':
        return 'Terminal: <Status> ...'
    return 'Terminal: <Status> pending messages'
async def handle message(update: Update, context:
ContextTypes.DEFAULT TYPE):
    message type = update.message.chat.type
    text: str = update.message.text
    print(f'User ({update.message.chat.id}) in
{message_type}: "{text}"')
    response: str = handle_response(text)
    print('<Bot>', response)
    await update.message.reply text(response)
#Errors
async def error(update: Update, context:
ContextTypes.DEFAULT TYPE):
```

```
print(f'Update {update} caused error
{context.error}')
def main():
    print('Starting bot')
    app = Application.builder().token(TOKEN).build()
    app.add handler(CommandHandler('start',
start command))
    app.add_handler(CommandHandler('help',
help_command))
    app.add_handler(CommandHandler('custom',
custom command))
    app.add_handler(MessageHandler(filters.TEXT,
handle message))
    app.add_error_handler(error)
    print('Polling...')
    app.run_polling(poll_interval=3)
if name == " main ":
    main()
```

### **Result:**

