



Bits and Bots

International study
group for developing
digital skills



Digital Preservation Awards 2024

Teaching and Communications





Why start a study group?

- 🐛 Digital skills needed in day to day job
- 🐛 Lack of knowledge and time
- 🐛 Learn the basics in a group...
- 🐛 ... but not turning into IT experts
- 🐛 Motivation is needed





Modules

Python

1. Installation and Python basics
2. Your first games
3. Functions, Loops and Debugging
4. Lists and Dictionaries
5. From A(I) to B(agels)
6. Coordinates and a Treasure Hunt
7. Advanced AI and Coordinates
8. Pygame

Front-end development

1. Websites 101 and Twine Basics
2. HTML, Markdown and Your First Website
3. HTML and CSS
4. Embedding and Tools
5. JavaScript
6. JavaScript Continued / Advanced Twine
7. Prototyping
8. Final Projects






Schedule

Module	Data
1	February 15 th – March 15 th
2	March 15 th – April 15 th
3	April 15 th – May 15 th
4	May 15 th – June 15 th
5	June 15 th – July 15 th
Summer break	
6	September 15 th – October 15 th
7	October 15 th – November 15 th
8	November 15 th – December 15 th



Expert sessions



-  Create a 3D box in **HTML**
-  Analyse a Twitter archive with just 4 lines of code in **Python**
-  Starting with **UX design**



Expert sessions



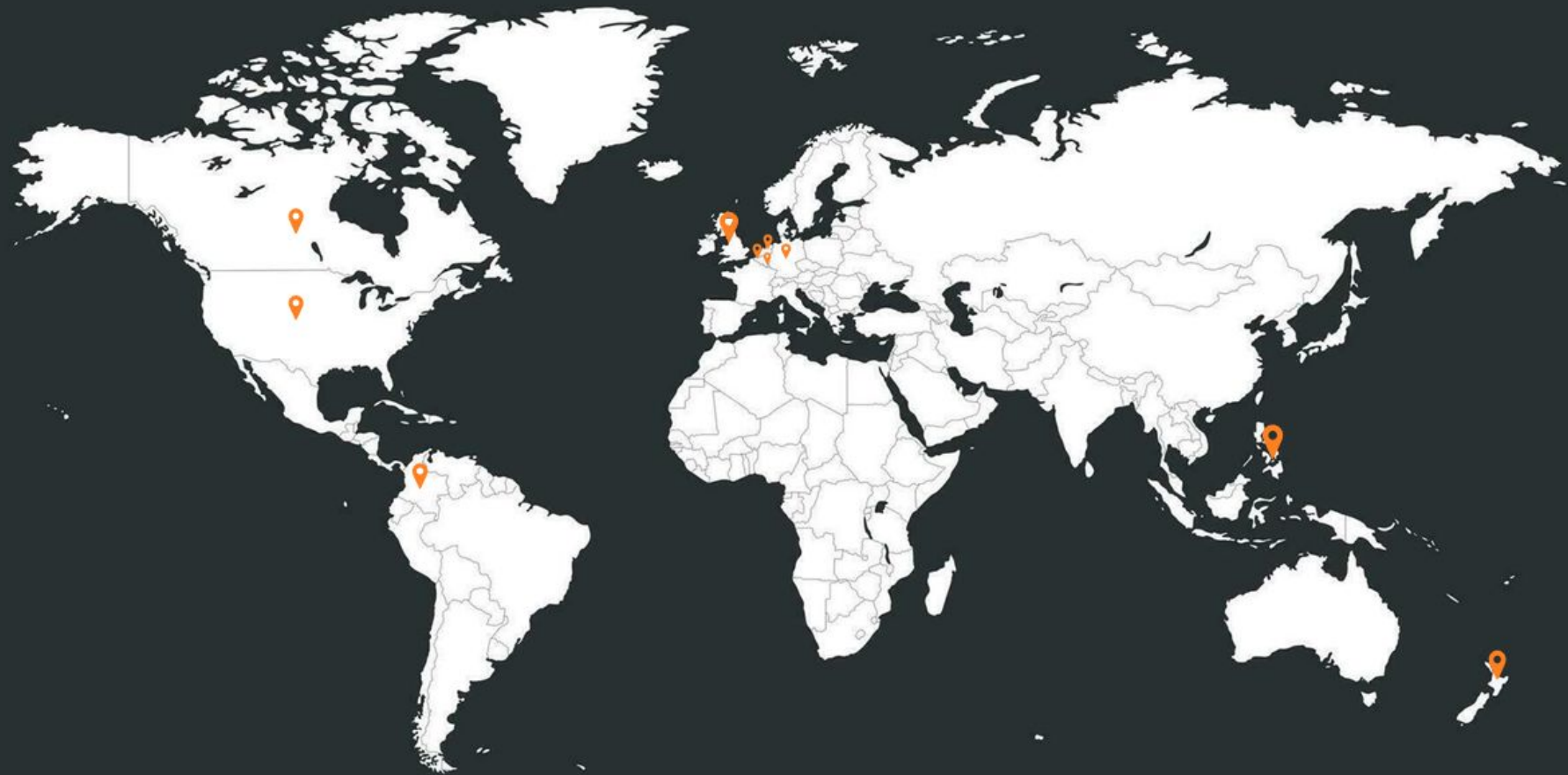
Using the **command prompt** in Windows



What is **GitHub** and how to use it?



Introduction to **APIs**: What is it, how to use it and how to create an API.



Bits_and_Bots

Events

WELCOME

welcome

-notifications_and_u...

COMMUNITY

main-channel

python_games

web_games

test_bed

admin_shizzle

VOICE CHANNELS

General

Working together

Susanne Online

Hi guys, I tried to get the password code from the introduction of Automate the boring stuff to work, but without success. The .txt file is located in the same directory as the python program file, which Geeks for Geeks told me to do. Has anyone else tried this or has anyone an idea what I'm doing wrong?

```

• Keep doing that until this condition is true...
You can combine these building blocks to create
For example, here are the programming instructions
program written in the Python programming language
software runs each line of code (some lines are run
else Python runs some other lines until it reaches the
• passwordFile = open('secretPasswordFile.txt')
• secretPassword = passwordFile.read()
• print('Enter your password:')
typePassword = input()
• if typePassword == secretPassword:
    • print('Access granted!')
    • if typePassword == '12345':
        • print('That password is not that an idiot gave...')
else:
    • print('Access denied!')
You should also know that Python does not use

```

- Anne-Sophie** 01/03/2024, 13:40
i think it's the position of the last else
With which if do you want that else be an alternative ? the first one or the second one ?
The indent is important.
- Eva** 01/03/2024, 13:44
True. I moved the 'else' to the same position as the first if, like in the book. Now the Access granted option works and the Access denied, but not the 12345
If I type 12345, it says Access denied, so maybe this has also to do with the position of the second if
- Anne-Sophie** 01/03/2024, 13:47
In order to have That password is..., you should have 12345 in SecretPasswordFile.txt and enter it in the prompt
- Eva** 01/03/2024, 13:49
I put 12345 in the text file, but it still says Access denied
- Anne-Sophie** 01/03/2024, 13:58
If you add print(variable_name), you can check the content of typePassword and secretPassword.
Maybe you can try to insert print(typePassword) and print(secretPassword) before the if (edited)
and see what is the value of the two variables.
- Eva** 01/03/2024, 14:11
It looks like the values of the two variables are correct. I also found something about using several conditions, but the alternative given for the second if (elif) results in an invalid syntax
- Nathan** 01/03/2024, 14:12
Just chiming in, could you send a screenshot of your new code? I have a feeling it has to do with indents, but that should usually throw up an error

ONLINE — 6

Boukje

Jasper

Julia

Lotte

Susanne

The Butler APP
Playing dymo.egg | Help

OFFLINE — 45

Ing3bor9

Allie

Anne-Sophie

Bonestaak

Coen_UBU

CPaintner

dani

David

DM Fred

emmab1793

Esther

Eva

Francesca



main 1 Branch Tags

Go to file

Add file

<> Code

About

The study group Bits and Bots accommodates digital preservation professionals seeking coding abilities. In this repository, you can find our learning materials.

Readme

MIT license

Activity

7 stars

2 watching

7 forks

Report repository

Releases

No releases published

[Create a new release](#)

Packages

No packages published

[Publish your first package](#)

Contributors 7



Languages

JavaScript 99.9% Batchfile 0.1%

Suggested workflows

Based on your tech stack:

Webpack Configure

Build a NodeJS project with npm and webpack.

Datadog Synthetics Configure

Run Datadog Synthetic tests within your

Susanne404	Merge pull request #13 from EvavandenHurk/patch-2	9ce0fbc · 44 minutes ago	76 Commits
Expert_sessions	Delete Expert_sessions/GitHub/Intro_to_GitHub.md	2 weeks ago	
Games	Update ReadMe.md	4 days ago	
Python_reources	Delete Python_reources/Python Guide - modules 1 - 6.pdf	48 minutes ago	
front-end_resources	Delete front-end_resources/HTML_Twine Guide - modules 1 ...	47 minutes ago	
media	Add files via upload	5 months ago	
LICENSE	Initial commit	6 months ago	
README.md	Update README.md	47 minutes ago	

README MIT license



Bits-and-Bots-Study-Group

Who are we?

Bits and Bots is a study group teaching digital archivists coding skills! The group is open to all, the goal being to learn together as a community instead of in isolation. In September 2023, during iPRES2024 in Ghent, Bits and Bots has been awarded the [Digital Preservation Award](#) in the category teaching and communications!

What makes us different?

One of the things that makes us different from a normal coding course is to learn through the creation of games!

In each learning module there is the opportunity to create a tangible output (in the form of a game) that can be shared in the group or amongst colleagues. This means that you can see immediate results and apply what you've



Games

This is an area for participants of the program to share and upload the games they have created so far.

Below is a list of games that have their own repository or webpage elsewhere

Python Games

- [ArchiveWordPy](#): Guess the archives word in this terminal-based game inspired by Wordle
- [DigiPres Hangman](#): Can you figure out the digital preservation term one letter at a time? Figure out the term before obsolescence worm destroys the file!
- [Hangmap](#): Your computer is suffering from severe bitrot. Guess the digital heritage / preservation word before you have to start using 'hangmappen' again for your archival endeavours!
- [Preservation Python](#): Preservation Python is a snake-type game where the player controls a continually shrinking python, a metaphor for obsolescence and data loss. Requires the pygame library.
- [Preservation Choice](#): You have been given a digital archive to preserve. Which option will you choose and what effect does your decision have?

Front-end Games

- [Medieval Action](#): Who will win? Bowman, swordsman or horseman? A medieval game inspired by the classic 'rock, paper, scissors' game
- [Dangers in Arkam](#): Can you escape the haunted hospital?
- [Stolen Archive](#): A digital record has been stolen! Use your knowledge of digital archiving to save the record.
- [Broomy Witch](#): A flappy bird inspired game, but instead of a bird you are a witch on a broom. Avoid the randomized obstacles and enemies, or shoot the latter down with your wand. Score points with each obstacle you pass without falling of your broom!
- [Who wants to ruin Professor Schmouh's data?](#) : This is a very partial game - in French in the enventuality I can reuse it as a training tool. The goal is to find who wants to destroy Professor Shmouh data but it's really not finished yet!
- [Duck Archive](#): You are a duck and you work at the Duck Archive. One day your boss aks you to fetch a file. Will you obey?
- [File Format Fling](#) : A dating simulation game where you find yourself choosing between multiple highly eligible file formats in a bid to find love, and possibly more. Will your lonely soul and your work life balance finally find peace?



Hangman in Python

```
64. def getGuess(alreadyGuessed):
65.     # Returns the letter the player entered. This function makes sure the
        player entered a single letter and not something else.
66.     while True:
67.         print('Guess a letter.')
68.         guess = input()
69.         guess = guess.lower()
70.         if len(guess) != 1:
71.             print('Please enter a single letter.')
72.         elif guess in alreadyGuessed:
73.             print('You have already guessed that letter. Choose again.')
74.         elif guess not in 'abcdefghijklmnopqrstuvwxyz':
75.             print('Please enter a LETTER.')
76.         else:
77.             return guess
```




Game in Twine

Welcome to the Digital Preservation Dating Simulator!

You are a happy, but lonely, digital preservation practitioner looking for love but it's just not working. You head to bed alone, ready for a sleepless night dreaming of lost love. But tonight, in your dreams, you are given the chance of love.

Are you brave enough to find love or will you wake up as alone as you started?

Start!







Profiles

Achievements

About






Lessons learned

-  Modules are clear
-  Expert sessions are helpful
-  Dedication organisers is much appreciated
-  You can learn as much extras as you like
-  Hard to ask for help if people are behind
-  More links with practice would be helpful







Experiences members

-  “I can read and understand R-scripts from data analysts.”
-  “Because of increased knowledge of HTML, I understand the structure of archived websites better.”
-  “The curriculum has helped me to optimize my pre-ingest work flows.”



What's new for next year?


-  More balanced modules
-  Two recess periods
-  Assignments tailored to your daily work
-  Returning favorite expert sessions


Program Duration: April 1, 2025 – February 2026.



Are you interested? Join a kick-off meeting!

Meeting Options

 Tuesday, March 25th | 10:00-11:00 CET

 Thursday, March 27th | 17:00-18:00 CET