README

Github Repository Contents

1. **index.html** – home page of the website.
2. **faculty.html** – Faculty page html code
3. **gunasekaran.html** – Personal webpage of sir
4. **publications.html** – Publication details
5. **research_groups.html** – research group page
6. **networks.html** – next generation networks webpage(directed from research_groups.html)
7. **av.html** – autonomous vehicles (directed from research_groups.html)
8. **uav.html** – Unmanned aerial vehicles (directed from research_groups.html)
9. **collaborators.html** – collaborator page
10. **funded_projects.html** -funded projects page
11. **newsroom.html** – newsroom page
12. **contactus.html** – contact us page
13. **styles** - styles folder contains all CSS for the website. For about, navigation bar, Domain, collaborators, contact us, domain people, footer, home, funded projects, people, newsroom, publications, working groups
14. **scripts** – scripts folder contains all Javascript files
15. **assets** – asset folder contains images of people included in website
16. **data** – data folder contains json file for funded projects, newsroom, publication and students pages
17. **people** – people folder contains all the details of director page

Add/Update New Data into the Website

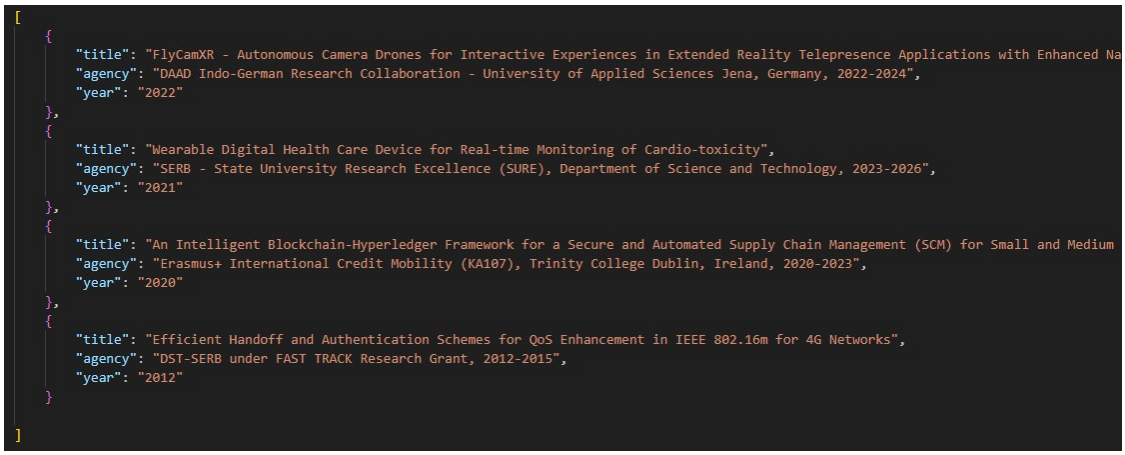
For : Publications, Funded Projects, Alumni, Newsroom pages

It is possible to add data directly in json file or through excel.
Or data can be updated to an excel file after making necessary conversions.

Method I:
Using the json files :

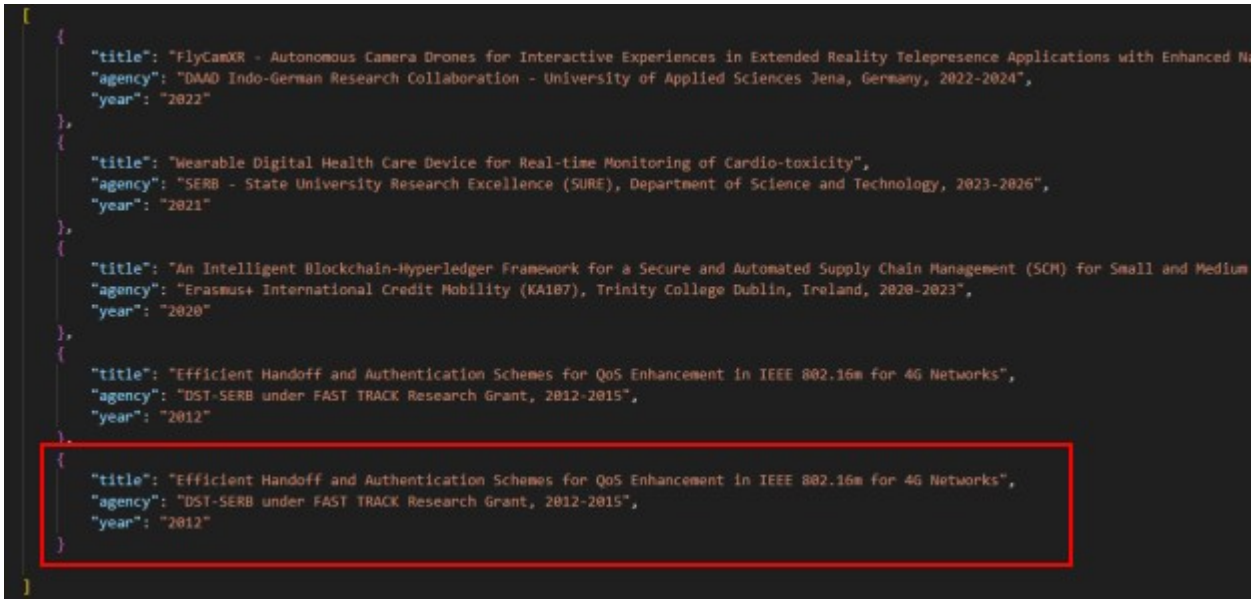
1. Get Github desktop and login through your Github account.
2. Clone the NGN Lab repository to have a backup of the files locally in your desktop.
3. Pull the original version- to get the most recent version.
4. Open the required json file.
5. Copy the contents of one segment and paste it at the appropriate location.
6. Without changing the attributes of the code snippet, change only the contents and save the file with the same name. (Steps 4-6 are illustrated below)
7. Push it into the repository which will rewrite the old json file with the updated one.
8. Write summary of the changes made .
9. Click “commit to main” to make the changes permanent.

Step 4: Open the json file



```
[
    {
        "title": "FlyCamXR - Autonomous Camera Drones for Interactive Experiences in Extended Reality Telepresence Applications with Enhanced Na
        "agency": "DAAD Indo-German Research Collaboration - University of Applied Sciences Jena, Germany, 2022-2024",
        "year": "2022"
    },
    {
        "title": "Wearable Digital Health Care Device for Real-time Monitoring of Cardio-toxicity",
        "agency": "SERB - State University Research Excellence (SURE), Department of Science and Technology, 2023-2026",
        "year": "2021"
    },
    {
        "title": "An Intelligent Blockchain-Hyperledger Framework for a Secure and Automated Supply Chain Management (SCM) for Small and Medium
        "agency": "Erasmus+ International Credit Mobility (KA107), Trinity College Dublin, Ireland, 2020-2023",
        "year": "2020"
    },
    {
        "title": "Efficient Handoff and Authentication Schemes for QoS Enhancement in IEEE 802.16m for 4G Networks",
        "agency": "DST-SERB under FAST TRACK Research Grant, 2012-2015",
        "year": "2012"
    }
]
```

Step 5: Copy and paste the code snippet



```
[
    {
        "title": "FlyCamXR - Autonomous Camera Drones for Interactive Experiences in Extended Reality Telepresence Applications with Enhanced Na
        "agency": "DAAD Indo-German Research Collaboration - University of Applied Sciences Jena, Germany, 2022-2024",
        "year": "2022"
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    {
        "title": "Wearable Digital Health Care Device for Real-time Monitoring of Cardio-toxicity",
        "agency": "SERB - State University Research Excellence (SURE), Department of Science and Technology, 2023-2026",
        "year": "2021"
    },
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        "title": "An Intelligent Blockchain-Hyperledger Framework for a Secure and Automated Supply Chain Management (SCM) for Small and Medium
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        "year": "2020"
    },
    {
        "title": "Efficient Handoff and Authentication Schemes for QoS Enhancement in IEEE 802.16m for 4G Networks",
        "agency": "DST-SERB under FAST TRACK Research Grant, 2012-2015",
        "year": "2012"
    },
    {
        "title": "Efficient Handoff and Authentication Schemes for QoS Enhancement in IEEE 802.16m for 4G Networks",
        "agency": "DST-SERB under FAST TRACK Research Grant, 2012-2015",
        "year": "2012"
    }
]
```
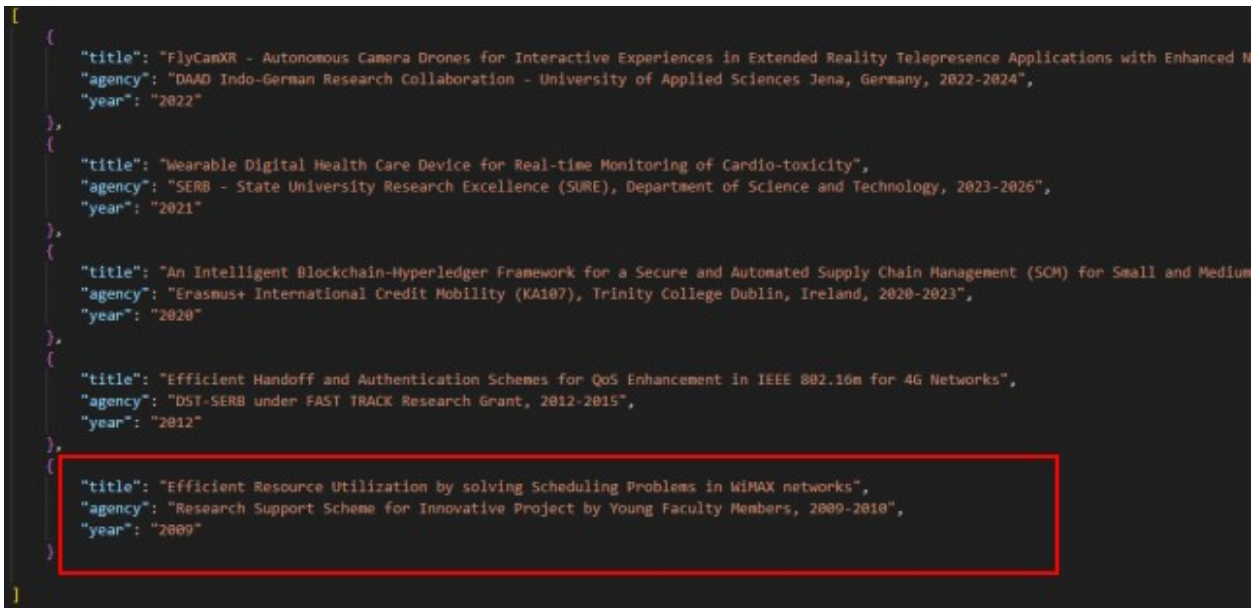

Step 6: Edit the content and save the file with the same name



```
[
    {
        "title": "FlyCamXR - Autonomous Camera Drones for Interactive Experiences in Extended Reality Telepresence Applications with Enhanced N
        "agency": "DAAD Indo-German Research Collaboration - University of Applied Sciences Jena, Germany, 2022-2024",
        "year": "2022"
    },
    {
        "title": "Wearable Digital Health Care Device for Real-time Monitoring of Cardio-toxicity",
        "agency": "SERB - State University Research Excellence (SURE), Department of Science and Technology, 2023-2026",
        "year": "2021"
    },
    {
        "title": "An Intelligent Blockchain-Hyperledger Framework for a Secure and Automated Supply Chain Management (SCM) for Small and Medium
        "agency": "Erasmus+ International Credit Mobility (KA107), Trinity College Dublin, Ireland, 2020-2023",
        "year": "2020"
    },
    {
        "title": "Efficient Handoff and Authentication Schemes for QoS Enhancement in IEEE 802.16m for 4G Networks",
        "agency": "DST-SERB under FAST TRACK Research Grant, 2012-2015",
        "year": "2012"
    },
    {
        "title": "Efficient Resource Utilization by solving Scheduling Problems in WiMAX networks",
        "agency": "Research Support Scheme for Innovative Project by Young Faculty Members, 2009-2010",
        "year": "2009"
    }
]
```

Method II:
Updating the file contents through Excel

Pre-requisites- Python 3.6.1
Modules- pandas, workbook, openpyxl

1. Get Github desktop and login through your Github account.
2. Clone the NGN Lab repository to have a backup of the files locally in your desktop.
3. Pull the original version- to get the most recent version.
4. Convert the required json file to excel sheet using command :
   "python json-excel.py <json filename>" in Command line.
5. Add the data which has to be updated in the website to the excel sheet.
6. Once the data is added, save it and convert the excel to json file using command
   "python excel-json.py <excel filename>" (Steps 4-6 are illustrated below)
7. Push the file in Ngn lab repository.
8. Write summary of the changes made .
9. Click "commit to main" to make the changes permanent.
10. If a change has been made and committed accidentally , to recover the old code, "revert" can be used.

Updating the file contents through Excel (Illustration):

Step 1: Install the necessary modules by running the following commands on the CMD
(This is a one time step. Need not be repeated for further updations.)

pip install pandas

```
C:\Users\CMO\Downloads>pip install pandas
Collecting pandas
  Downloading pandas-2.0.2-cp311-cp311-win_amd64.whl (10.6 MB)
     ---------------------------------------- 10.6/10.6 MB 11.3 MB/s eta 0:00:00
Requirement already satisfied: python-dateutil>=2.8.2 in c:\users\cmo\appdata\local\pac
lcache\local-packages\python311\site-packages (from pandas) (2.8.2)
Collecting pytz>=2020.1 (from pandas)
  Downloading pytz-2023.3-py2.py3-none-any.whl (502 kB)
     ---------------------------------------- 502.3/502.3 kB 7.8 MB/s eta 0:00:00
Collecting tzdata>=2022.1 (from pandas)
  Downloading tzdata-2023.3-py2.py3-none-any.whl (341 kB)
     ---------------------------------------- 341.8/341.8 kB 10.4 MB/s eta 0:00:00
Requirement already satisfied: numpy>=1.21.0 in c:\users\cmo\appdata\local\packages\pyt
cal-packages\python311\site-packages (from pandas) (1.24.2)
Requirement already satisfied: six>=1.5 in c:\users\cmo\appdata\local\packages\pythonso
ackages\python311\site-packages (from python-dateutil>=2.8.2->pandas) (1.16.0)
Installing collected packages: pytz, tzdata, pandas
Successfully installed pandas-2.0.2 pytz-2023.3 tzdata-2023.3
```

pip install openpyxl

```
C:\Users\CMO\Downloads>pip install openpyxl
Collecting openpyxl
  Downloading openpyxl-3.1.2-py2.py3-none-any.whl (249 kB)
     ---------------------------------------- 250.0/250.0 kB 3.8 MB/s eta 0:00:00
Collecting et-xmlfile (from openpyxl)
  Downloading et_xmlfile-1.1.0-py3-none-any.whl (4.7 kB)
Installing collected packages: et-xmlfile, openpyxl
Successfully installed et-xmlfile-1.1.0 openpyxl-3.1.2
```

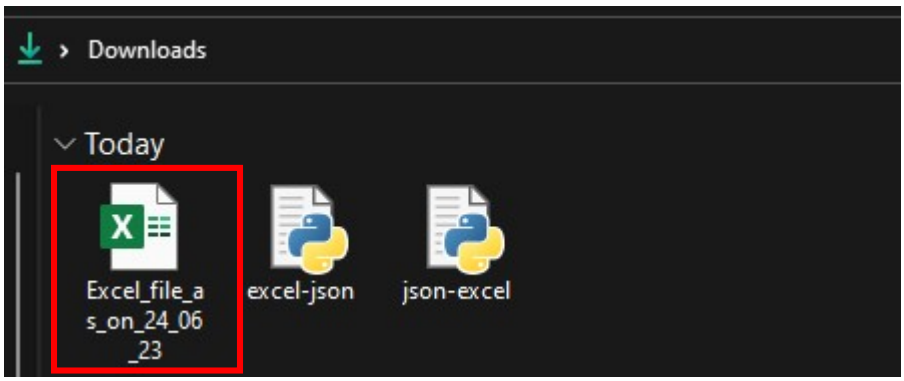
pip install workbook

```
C:\Users\CMO\Downloads>pip install workbook
Collecting workbook
  Downloading workbook-1.1.tar.gz (2.0 kB)
  Installing build dependencies ... done
  Getting requirements to build wheel ... done
  Preparing metadata (pyproject.toml) ... done
Collecting xlutils (from workbook)
  Downloading xlutils-2.0.0-py2.py3-none-any.whl (55 kB)
     ---------------------------------------- 55.1/55.1 kB 3.0 MB/s eta 0:00:00
Collecting xlwt (from workbook)
  Downloading xlwt-1.3.0-py2.py3-none-any.whl (99 kB)
     ---------------------------------------- 100.0/100.0 kB 1.9 MB/s eta 0:00:00
Collecting xlrd>=0.7.2 (from xlutils->workbook)
  Downloading xlrd-2.0.1-py2.py3-none-any.whl (96 kB)
     ---------------------------------------- 96.5/96.5 kB 5.8 MB/s eta 0:00:00
Building wheels for collected packages: workbook
  Building wheel for workbook (pyproject.toml) ... done
  Created wheel for workbook: filename=workbook-1.1-py3-none-any.whl size=2387 sha256=d0501c569
f6
  Stored in directory: c:\users\cmo\appdata\local\packages\pythonsoftwarefoundation.python.3.11
f\e8\82dd05c4dc7da1a5957f7c46118e239e6b0591a83b3e5c42e5
Successfully built workbook
Installing collected packages: xlwt, xlrd, xlutils, workbook
  WARNING: The script margins.exe is installed in 'C:\Users\CMO\AppData\Local\Packages\PythonSo
\local-packages\Python311\Scripts' which is not on PATH.
  Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-w
Successfully installed workbook-1.1 xlrd-2.0.1 xlutils-2.0.0 xlwt-1.3.0
```

Step 2: Run the command: python json-excel.py <json filename>

```
C:\Users\CMO\Downloads>python json-excel.py fundedProjects
```

The excel file has been created

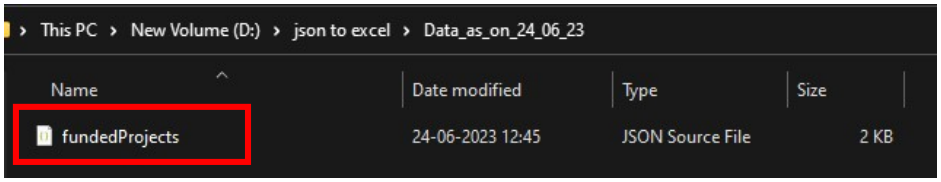


Step 3: Make required changes to the excel file

Step 4: Create a directory named “json to excel” in the D drive and run the following command: python excel-json.py <excel filename>

```
C:\Users\CMO\Downloads>python excel-json.py Excel_file_as_on_24_06_23
```

The converted json file with the updated details can be found on the json to excel directory inside the Data_as_on subdirectory



This file can now be pushed into the github repository using Github Desktop.