Scheduler

Handles the following requirements:

- Unlimited number of people

- Preference to not schedule the same group as the previous scheduling run

- Support for preferences - prefer to be/not to be scheduled with certain people

Data expectations:

- Full name, initials, optional preferences, optional contact information

- Initials are expected to be unique

- last scheduled details are stored in the same json file

usage: scheduler.py [-h] --input INPUT [--count COUNT]

Scheduler

options:

-h, --help show this help message and exit

--input INPUT, -i INPUT

Input file name

--count COUNT, -c COUNT

Number of people to schedule, must be above 1

If the schedule cannot be created because of insufficient available people on the list, an error message will be printed.

Input file is expected in JSON format. Below is an example of the valid input file:

{

"people": [

{

"name": "John Doe",

"initials": "JD",

"schedule": false,

"contact\_details": "john@example.com",

"preferences": [

{

"initials": "AS",

"flag": true

}

]

},

{

"name": "Alice Smith",

"initials": "AS",

"contact\_details": "alice@example.com"

},

{

"name": "Bob Johnson",

"initials": "BJ",

"contact\_details": "bob@example.com"

},

{

"name": "Charlie Brown",

"initials": "CB",

"contact\_details": "charlie@example.com",

"preferences": [

{

"initials": "DE",

"flag": false

}

]

},

{

"name": "David Lee",

"initials": "DL",

"contact\_details": "david@example.com"

},

{

"name": "Eve Taylor",

"initials": "ET",

"contact\_details": "eve@example.com"

},

{

"name": "Frank White",

"initials": "FW",

"contact\_details": "frank@example.com",

"preferences": [\

{

"initials": "GH",

"flag": true

}

]

},

{

"name": "Grace Miller",

"initials": "GM",

"contact\_details": "grace@example.com"

},

{

"name": "Henry Clark",

"initials": "HC",

"contact\_details": "henry@example.com"

},

{

"name": "Ivy Garcia",

"initials": "IG",

"contact\_details": "ivy@example.com",

"preferences": [

{

"initials": "JK",

"flag": false

}

]

}

]

}

The following example demonstrates a schedule for 5 people based on the input file above:

python3 scheduler.py -i people.json -c 5

Scheduled People:

{'name': 'John Doe', 'initials': 'JD', 'schedule': True, 'contact\_details': 'john@example.com', 'preferences': [{'initials': 'AS', 'flag': True}]}

{'name': 'Alice Smith', 'initials': 'AS', 'contact\_details': 'alice@example.com'}

{'name': 'Charlie Brown', 'initials': 'CB', 'contact\_details': 'charlie@example.com', 'preferences': [{'initials': 'DE', 'flag': False}]}

{'name': 'Bob Johnson', 'initials': 'BJ', 'contact\_details': 'bob@example.com'}

{'name': 'Grace Miller', 'initials': 'GM', 'contact\_details': 'grace@example.com'}