High level structure

4 requiered fields

```
Notebook.ipynb
{
    "metadata" : { }
    "nbformat" : 4
    "nbformat_minor" : 2
    "cells" : [ ]
}
```

Dictionary

Integers

List of notebook cells
Each cell is dictionary

Notebook.ipynb
is the MVP
of empty notebook

- Notebook metadata
  - place for arbitrary JSONable information about notebook
  - all fields are optional, none are required
  - Custom metadata should reside in sufficiently unique namespace
  - only 2 keys are officially defined Kernelspec and authors

- Cells list
  - Every entry is dictionary

```
{
    "cell_type" : "type",
    "metadata" : { },
    "source" : "single string or [list, of, strings]",
}
```

  - Markdown cells (GitHub - flavored Markdown)

```
"source" : [
    "multi-line\n",
    "*markdown*"
]
```

← Weird bug here when you open for the first time ...

  - Code cells

```
"cells": [
{
        "cell_type": "code",
        "execution_count": 1,          ← Execution counter
        "metadata": {},                   Could be integer or null
        "outputs": [ ],
        "source": ["x = 1"]
},
{
        "cell_type": "code",
        "execution_count": null,
        "metadata": {},
        "outputs": [ ],
        "source": [ ]
}
```