Running the web api

Health check

To check, whether the web service is running, goto northbay.cs.rit.edu:5050

Running the parser

Use the endpoint northbay.cs.rit.edu:5050/predict

Input and Output JSON formats

Handwritten formula strokes as input

```
{
  "request_time": "datetime",
  "input_type": "strokes",
  "file_id": "string",
  "annotation": "string",
  "input_strokes": [
    {
      "points": "string",
      "id": "string"
    },
    {
      "points": "string",
      "id": "string"
    },
    ...,
    {
      "points": "string",
      "id": "string"
    }
  ]
}
```

Example

```
{
    "request_time": "2021-01-22T01:59:06",
    "input_type": "strokes",
    "file_id": "ISICal19_1201_em_751",
    "annotation": "string",
    "input_strokes": [
        {
            "points": "18 105, 18 104, 18 103, 18 102, 18 101, 18 100, 19 99, 20 98, 21 97,
            "id": "0"
```

```
},
{
    "points": "77 78, 78 77, 78 76, 77 77, 76 78, 75 79, 74 80, 73 82, 72 83, 72 84,
    "id": "1"
},
{
    "points": "88 109, 87 109, 86 109, 85 109, 84 109, 83 109, 82 109, 81 108, 82 10
    "id": "2"
},
{
    "points": "84 122, 83 122, 84 122, 86 122, 88 121, 90 120, 92 120, 95 119, 100 1
    "id": "3"
},
{
    "points": "150 57, 149 57, 148 57, 147 58, 146 59, 145 60, 144 62, 143 63, 142 6
    "id": "4"
},
{
    "points": "193 85, 194 84, 194 83, 194 82, 194 81, 194 80, 194 79, 193 78, 192 7
    "id": "5"
},
{
    "points": "208 81, 208 80, 209 79, 209 78, 209 77, 210 77, 212 76, 213 76, 214 7
    "id": "6"
},
{
    "points": "273 79, 273 78, 273 77, 273 76, 272 76, 272 75, 272 74, 272 75, 272 7
    "id": "7"
},
{
    "points": "262 91, 263 91, 264 91, 266 90, 268 90, 270 90, 272 89, 279 88, 281 8
    "id": "8"
},
{
    "points": "311 63, 311 62, 311 63, 311 64, 311 66, 311 69, 310 71, 310 74, 310 7
    "id": "9"
},
{
    "points": "334 53, 334 52, 334 53, 334 54, 335 54, 336 55, 337 56, 338 57, 339 5
    "id": "10"
},
{
    "points": "387 50, 386 50, 385 50, 385 51, 384 52, 383 53, 382 54, 381 55, 380 5
    "id": "11"
},
{
```

```
            "points": "418 73, 418 72, 418 71, 417 71, 416 71, 415 71, 413 71, 411 71, 409 7
            "id": "12"
        },
        {
            "points": "429 79, 429 78, 429 77, 429 76, 430 76, 431 75, 432 75, 433 74, 434 7
            "id": "13"
        },
        {
            "points": "474 73, 474 72, 474 73, 474 74, 474 76, 473 78, 473 80, 472 82, 472 8
            "id": "14"
        },
        {
            "points": "462 91, 461 91, 461 90, 462 90, 463 90, 465 90, 467 90, 470 89, 472 8
            "id": "15"
        },
        {
            "points": "510 94, 512 93, 513 93, 513 92, 513 91, 512 91, 512 90, 511 90, 510 9
            "id": "16"
        },
        {
            "points": "532 57, 531 57, 531 56, 531 57, 532 57, 533 59, 534 60, 536 61, 537 6
            "id": "17"
        },
        {
            "points": "551 62, 550 62, 550 61, 551 61, 552 61, 555 61, 557 61, 559 61, 561 6
            "id": "18"
        },
        {
            "points": "580 65, 580 66, 580 65, 581 65, 583 63, 584 62, 586 60, 587 59, 589 5
            "id": "19"
        }
    ]
```


Output response for above input


```
{
    "response_time": "2021-01-22T01:59:08",
    "duration": 0.99,
    "input_type": "strokes",
    "input_file_id": "ISICal19_1201_em_751",
    "output_file_id": "ISICal19_1201_em_751",
    "annotation": "string",
    "mathml": "<mrow><msup><mi xml:id=\"0:\">x</mi>\n<mo xml:id=\"1:\">&prime;</mo>\n</msup>
    "latex": "\\(x^{\\prime}{= \\left( {a{x{+ {b{)\\left( {c{x{+ \\left. d \\right)^{- 1}}}}
    "lg": "0, sym0, x, 1.0, 0\n0, sym1, \\prime, 1.0, 1\n0, sym2, =, 1.0, 2, 3\n0, sym3, (,
}
```

Formula image as input

```
{
  "request_time": "datetime",
  "input_type": "strokes",
  "file_id": "string",
  "annotation": "string",
  "input_image": {
    "base64_img": "string",
    "dpi": int
  }
}
```

Example


```
{
    "request_time": "2021-01-22T01:59:43",
    "input_type": "image",
    "file_id": "28000104",
    "annotation": "string",
    "input_image": {
        "base64_img": "iVBORw0KGgoAAAANSUhEUgAAAToAAABWCAAAAAB6aAUVAAAAEE0lEQVR4nO1b27aEIAiF
        "dpi": 600
    }
}
```


Output response for above input


```
{
    "response_time": "2021-01-22T01:59:45",
    "duration": 0.77,
    "input_type": "image",
    "input_file_id": "28000104",
    "output_file_id": "28000104",
    "annotation": "string",
    "mathml": "<mrow >\n    <msub >\n        <mi  xml:id = \"2:\" >c</mi>\n        <mrow >\n
    "latex": "\\(c_{i{jk}}{\\neq 0}\\)",
    "lg": "0, sym0, c, 1.0, 2\n0, sym1, i, 1.0, 4, 6\n0, sym2, j, 1.0, 5, 7\n0, sym3, k, 1.0
}
```