API Link: (To use GET, POST from Postman)

<https://flexchain-functionapp-testenv.azurewebsites.net/api/flexibilityOffers>

<https://flexchain-functionapp-testenv.azurewebsites.net/api/flexibilityRequests>

<https://flexchain-functionapp-testenv.azurewebsites.net/api/flex_matching_algo_Results>

**Offer Format:**

"UserId": "user001",

            "FlexOfferList": [

                {

                    "BidPriceCtpEUList": "null",

                    "EndFlexShiftTimeslot": "2021-10-05T21:00:00Z",

                    "RequestId": "Req000001",

                    "StartFlexShiftTimeSlot": "2021-10-05T19:00:00Z",

                    "TotalFlexOfferedEU": -6,

                    "id": **null**

                },

                {

                    "BidPriceCtpEUList": "null",

                    "EndFlexShiftTimeslot": "2021-10-05T19:15:00Z",

                    "RequestId": "Req000002",

                    "StartFlexShiftTimeSlot": "2021-10-05T19:00:00Z",

                    "TotalFlexOfferedEU": 2,

                    "id": **null**

                },

                {

                    "BidPriceCtpEUList": "8, 10, 12, 13",

                    "EndFlexShiftTimeslot": "2021-10-05T19:15:00Z",

                    "RequestId": "Req000006",

                    "StartFlexShiftTimeSlot": "2021-10-05T19:00:00Z",

                    "TotalFlexOfferedEU": 4,

                    "id": **null**

                },

                {

                    "BidPriceCtpEUList": "7",

                    "EndFlexShiftTimeslot": "2021-10-05T19:15:00Z",

                    "RequestId": "Req000007",

                    "StartFlexShiftTimeSlot": "2021-10-05T19:00:00Z",

                    "TotalFlexOfferedEU": 4,

                    "id": **null**

                }

            ]

**Request Format:**

(for fixed price):

"RequestId": "Req000001",

            "Mode": "fcfs",

            "FullfillmentFactor": "50",

            "IfFlexRequested": **true**,

            "Loc": {

                "user001": 3,

                "user002": 2,

                "user003": 5,

                "user004": 4

            },

            "MarketType": "fixedPrice",

            "MaxPriceCtpEU": "null",

            "PriceOfferCtpEU": "7",

            "ReferencePriceCtpEU": "null",

            "TimeSlot": "2021-10-05T15:15:00Z",

            "TotalFlexRequestedEU": "-11"

 "RequestId": "Req000005",

            "Mode": "fcfs",

            "FullfillmentFactor": "0",

            "IfFlexRequested": **false**,

            "loc": {

                "null": 0

            },

            "MarketType": "fixedPrice",

            "MaxPriceCtpEU": "null",

            "PriceOfferCtpEU": "null",

            "ReferencePriceCtpEU": "null",

            "TimeSlot": "2021-06-13T22:16:00Z",

            "TotalFlexRequestedEU": "null"

(for auction):

 "RequestId": "Req000006",

            "Mode": "MiP",

            "FullfillmentFactor": "50",

            "IfFlexRequested": **true**,

            "loc": {

                "user001": 1,

                "user002": 2,

                "user003": 5,

                "user004": 1

            },

            "MarketType": "auction",

            "MaxPriceCtpEU": "12",

            "PriceOfferCtpEU": "null",

            "ReferencePriceCtpEU": "10",

            "TimeSlot": "2021-10-05T15:00:00Z",

            "TotalFlexRequestedEU": "7"

 "RequestId": "Req000008",

            "Mode": "MiP",

            "FullfillmentFactor": "null",

            "IfFlexRequested": **false**,

            "loc": {

                "null": 0

            },

            "MarketType": "auction",

            "MaxPriceCtpEU": "null",

            "PriceOfferCtpEU": "null",

            "ReferencePriceCtpEU": "null",

            "TimeSlot": "2021-10-05T15:00:00Z",

            "TotalFlexRequestedEU": "null"

**Details on the Modes:**

Types of modes:

fcfs, maah, maav, mapw, miah, miav, mip, zufall

At one time all the request modes should be same (all fcfs, or all mip or all maav …).

**Note:**

**For** <https://flexchain-functionapp-testenv.azurewebsites.net/api/flex_matching_algo_Results>

**We do not put any details (Json) as the body for POST request. The server will take data from FlexibilityRequest and FlexibilityOffer and use the Matching Algorithm. The result of the matching algorithm is stored in the the flex\_matching\_algo\_Results table in the database.**

Matching Algo Result Format (The format in which matching algo results are stored in the table):

{

            "Requests": {

                "Req000001": {

                    "user001": 3,

                    "user003": 2,

                    "user004": 2,

                    "user002": 4

                },

                "Req000002": {

                    "fullfillment factor did not reach": 0

                },

                "Req000003": {

                    "ifflexrequested false": 0

                },

                "Req000004": {

                    "ifflexrequested false": 0

                },

                "Req000005": {

                    "ifflexrequested false": 0

                }

            },

            "id": "62b59a3b3b731ca98e88791c"

        },

        {

            "Requests": {

                "Req000001": {

                    "user001": 4,

                    "user002": 6,

                    "user003": 1

                },

                "Req000002": {

                    "fullfillment factor did not reach": 0

                },

                "Req000003": {

                    "ifflexrequested false": 0

                },

                "Req000004": {

                    "ifflexrequested false": 0

                },

                "Req000005": {

                    "ifflexrequested false": 0

                }

            },

            "id": "62beac901730b8d0d7eb7ed5"

        }