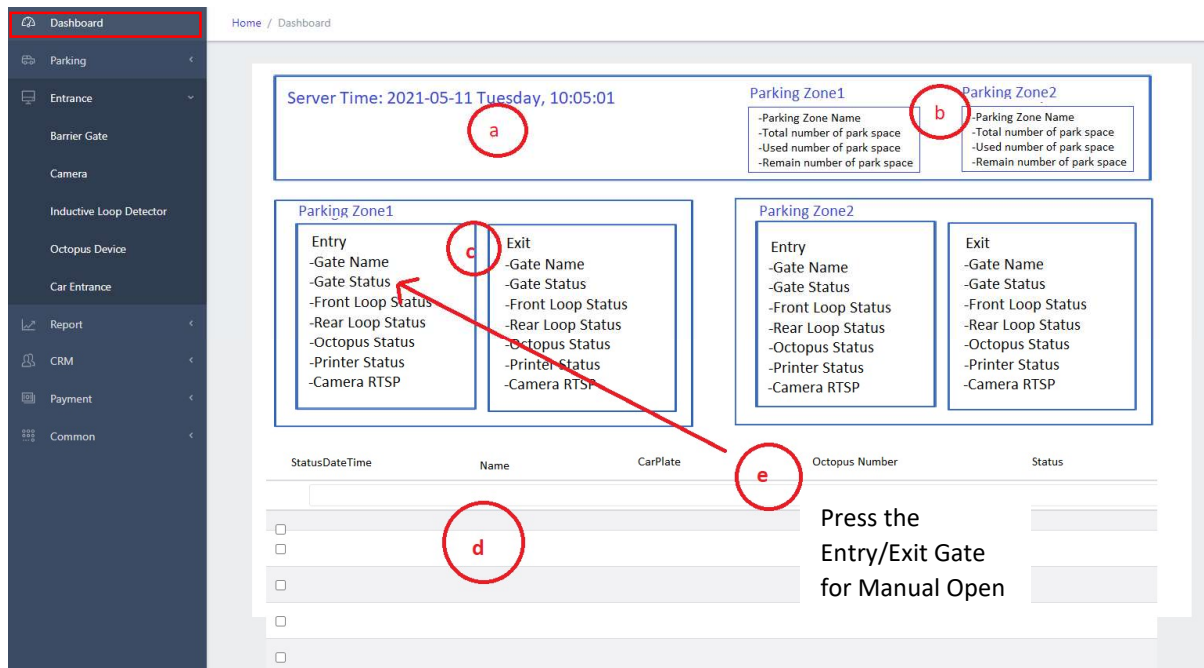# Part 4: Frontend Pages

1. Dashboard

a. Server Time Sample Json

API path: not ready

```
{
        ServerDate: 2021-05-03,
        ServerTime: 11:00:23
}
```
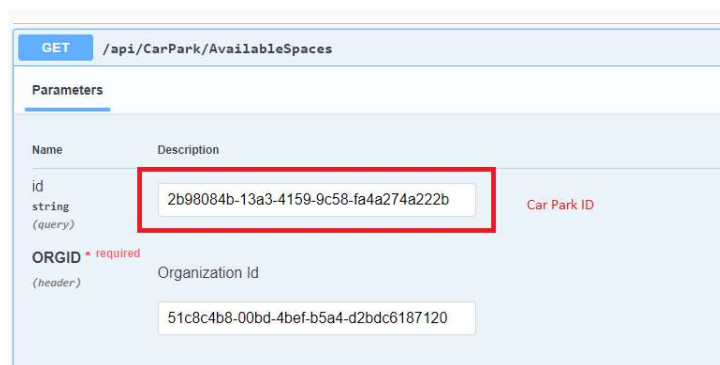
b. Park Zone Car Space info

Request API Path: /api/CarPark/AvailableSpaces

Input:

Output:

```
{
 "carParkId": "0000-0000-0000-0001",
 "carParkName": "New Car Park",
 "data": [
  {
   "ParkZoneId": "1111-2222-3333-4444",
   "ParkZoneName": "Demo-ParkZone1",
   "TotalParkingSpace": 40,
   "UsedParkingSpace": 10,
```

```
      "RemainParkingSpace": 20,
      "ReservedParkingSpace": 10
    },
    {
      "ParkZoneId": "1111-2222-3333-4445",
      "ParkZoneName": "Demo-ParkZone2",
      "TotalParkingSpace": 40,
      "UsedParkingSpace": 10,
      "RemainParkingSpace": 20,
      "ReservedParkingSpace": 10
    }
  ]
}
```

TotalParkingSpace: sum of all parking space
UsedParkingSpace: used for hourly parking
RemainParkingSpace: remain for hourly parking
ReservedParkingSpace: the parking space reserved for monthly parking

Data Update through SignalR Path: /dashboard-hub
Method Name: AvailableSpacesInfo
Sample Json:

```
{
  "ParkingZoneId":"2b900579-2570-42d5-b606-4acce208ac7d",
  "ParkingZoneName":"Parking Zone A",
  "TotalParkingSpaces":48,
  "UsedParkingSpace":26,
  "RemainParkingSpace":21,
  "ReservedParkingSpace":1
}
```

c. Sample Json for Parking Zone device info

Request API Path: /api/ParkingZone/GetParkingZoneDeviceInfo

Input:

Output:

```
{
  "parkingZoneId": "2b900579-2570-42d5-b606-4acce208ac7d",
  "parkingZoneName": "Parking Zone A",
  "entrance": [
    {
      "entranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
      "entranceName": "Entry-Test",
      "entryType": "Entry",
      "connectorDevices": [
        {
```

```json
      "deviceId": "d017c10f-a287-4b0f-9742-fb0feb4f9076",
      "deviceType": "BarrierGate",
      "deviceStatus": 0
    },
    {
      "deviceId": "74b6f78d-d288-4367-b64e-e5601a90c1d9",
      "deviceType": "InductiveLoopDetector",
      "deviceStatus": 0
    },
    {
      "deviceId": "b064d7ab-4efb-440c-b9a1-50829b209f0a",
      "deviceType": "OctopusDevice",
      "deviceStatus": 0
    },
    {
      "deviceId": "258ec6e5-ffe2-4fa9-a47f-0886f018d2dc",
      "deviceType": "InductiveLoopDetector",
      "deviceStatus": 0
    },
    {
      "deviceId": "5bd24dc2-6253-4180-998e-26083d70f936",
      "deviceType": "Camera",
      "deviceStatus": 0
    }
    ]
  },
  {
    "entranceId": "598b38ba-6624-43d4-a0bc-799e956deef8",
    "entranceName": "Exit-Test",
    "entryType": "Exit",
    "connectorDevices": [
    {
      "deviceId": "234a9f1c-8d28-4456-a7c2-3b688626f719",
      "deviceType": "Camera",
      "deviceStatus": 0
    },
    {
      "deviceId": "db4bf8e0-4dd3-4ca0-9671-4f5226884951",
      "deviceType": "InductiveLoopDetector",
      "deviceStatus": 0
    },
    {
      "deviceId": "3171061b-bcb4-4b29-8d20-667f76717df3",
      "deviceType": "BarrierGate",
      "deviceStatus": 0
    },
    {
      "deviceId": "92601a8d-0038-4fbc-893f-30ee0bbb4283",
      "deviceType": "OctopusDevice",
      "deviceStatus": 0
    },
    {
      "deviceId": "a8de6ea4-eec8-4137-9fe3-42b53eb50355",
      "deviceType": "InductiveLoopDetector",
      "deviceStatus": 0
    }
    ]
  }
  ]
}
```

For Digital Input Status(Gate input, FrontLoop, Rear Loop)

  -1: connector disconnected

   0: OFF

   1: ON

For Octopus, Printer, Camera Status

 -1: connector disconnected

 0: connector connected

Data Update through SignalR Path: /dashboard-hub
Method Name: GetParkingZoneDeviceInfo
Sample Json:

```
{
  "ParkingZoneId":"2b900579-2570-42d5-b606-4acce208ac7d",
  "ParkingZoneName":"Parking Zone A",
  "Entrance":[
   {
     "EntranceId":"c61fd54c-5b8f-405b-9777-a56d073a5cf6",
     "EntranceName":"Entry-Test",
     "EntryType":"Entry",
     "ConnectorDevices":[
      {
        "DeviceId":"d017c10f-a287-4b0f-9742-fb0feb4f9076",
        "DeviceName":"Barrier Gate 1",
        "DeviceType":"BarrierGate",
        "DeviceStatus":0
      },
      {
        "DeviceId":"74b6f78d-d288-4367-b64e-e5601a90c1d9",
        "DeviceName":"RearLoop 1",
        "DeviceType":"InductiveLoopDetector",
        "DeviceStatus":0
      },
      {
        "DeviceId":"b064d7ab-4efb-440c-b9a1-50829b209f0a",
        "DeviceName":"Octopus 1",
        "DeviceType":"OctopusDevice",
        "DeviceStatus":0
      },
      {
        "DeviceId":"20c824dd-a0c9-422d-9802-78b0d163c8a8",
        "DeviceName":"GateStatus 1",
        "DeviceType":"InductiveLoopDetector",
        "DeviceStatus":0
      },
      {
        "DeviceId":"258ec6e5-ffe2-4fa9-a47f-0886f018d2dc",
        "DeviceName":"FrontLoop 1",
        "DeviceType":"InductiveLoopDetector",
        "DeviceStatus":0
      },
```

```json
        {
          "DeviceId":"5bd24dc2-6253-4180-998e-26083d70f936",
          "DeviceName":"Cam 1",
          "DeviceType":"Camera",
          "DeviceStatus":0
        }
      ]
    },
    {
      "EntranceId":"598b38ba-6624-43d4-a0bc-799e956deef8",
      "EntranceName":"Exit-Test",
      "EntryType":"Exit",
      "ConnectorDevices":[
        {
          "DeviceId":"234a9f1c-8d28-4456-a7c2-3b688626f719",
          "DeviceName":"Cam 2",
          "DeviceType":"Camera",
          "DeviceStatus":0
        },
        {
          "DeviceId":"db4bf8e0-4dd3-4ca0-9671-4f5226884951",
          "DeviceName":"RearLoop 2",
          "DeviceType":"InductiveLoopDetector",
          "DeviceStatus":0
        },
        {
          "DeviceId":"3171061b-bcb4-4b29-8d20-667f76717df3",
          "DeviceName":"Barrier Gate 1",
          "DeviceType":"BarrierGate",
          "DeviceStatus":0
        },
        {
          "DeviceId":"92601a8d-0038-4fbc-893f-30ee0bbb4283",
          "DeviceName":"Octopus 2",
          "DeviceType":"OctopusDevice",
          "DeviceStatus":0
        },
        {
          "DeviceId":"a8de6ea4-eec8-4137-9fe3-42b53eb50355",
          "DeviceName":"FrontLoop 2",
          "DeviceType":"InductiveLoopDetector",
          "DeviceStatus":0
        },
        {
          "DeviceId":"817ba7d3-c133-41d2-a073-c6633493b4a1",
          "DeviceName":"GateStatus 2",
          "DeviceType":"InductiveLoopDetector",
          "DeviceStatus":0
        }
      ]
    }
  ]
}
```

d. Sample Json for entry /exit record

Request API path: /api/CarEntranceHistory

Input:

Output:

```json
{
  "data": [
    {
      "status": 0,
      "statusTime": "2021-05-27T09:46:53.765153Z",
      "carPlate": null,
      "octopusNumber": null,
      "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
      "id": "cff03d63-3bd0-46b1-8de4-febaf5a4d57e",
      "name": null
    },
    {
      "status": 3,
      "statusTime": "2021-05-27T09:46:45.7435Z",
      "carPlate": null,
      "octopusNumber": "888889",
      "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
      "id": "9b21cfc2-bc2a-4f03-90cd-569ede4c806a",
      "name": null
    },
    {
      "status": 0,
      "statusTime": "2021-05-27T09:46:45.499544Z",
      "carPlate": null,
      "octopusNumber": "888889",
      "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
      "id": "9faf3507-7853-4db9-b68f-7c76e36bdf3c",
      "name": null
    },
    {
      "status": 1,
      "statusTime": "2021-05-27T09:46:30.333912Z",
      "carPlate": null,
      "octopusNumber": null,
      "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
      "id": "cc1c0540-7d26-4513-ac82-420aed393fa7",
      "name": null
    },
    {
      "status": 0,
      "statusTime": "2021-05-27T09:45:59.45524Z",
      "carPlate": null,
```

```
    "octopusNumber": null,
    "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
    "id": "b4fa016a-a695-46de-b2fc-6cf88726cb57",
    "name": null
  },
  {
    "status": 3,
    "statusTime": "2021-05-27T08:05:18.036282Z",
    "carPlate": null,
    "octopusNumber": "888889",
    "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
    "id": "344060e5-9d7d-4e20-9ed3-253e46d216e8",
    "name": null
  },
  {
    "status": 1,
    "statusTime": "2021-05-27T08:05:16.463448Z",
    "carPlate": null,
    "octopusNumber": null,
    "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
    "id": "ee2a2cdd-7f41-4d81-8971-d8ab86f0b5ce",
    "name": null
  },
  {
    "status": 0,
    "statusTime": "2021-05-27T07:59:13.578365Z",
    "carPlate": null,
    "octopusNumber": null,
    "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
    "id": "34f785c1-9434-4151-927e-196827fd2da6",
    "name": null
  },
  {
    "status": 3,
    "statusTime": "2021-05-27T07:59:06.885635Z",
    "carPlate": null,
    "octopusNumber": "888889",
    "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
    "id": "e9b245d5-41b7-48da-b508-92951084f119",
    "name": null
  },
  {
    "status": 0,
    "statusTime": "2021-05-27T07:59:06.632224Z",
    "carPlate": null,
    "octopusNumber": "888889",
    "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
    "id": "d29f99dc-8b30-4eda-b0ef-a503fc0025c5",
    "name": null
  },
  {
    "status": 1,
    "statusTime": "2021-05-27T07:58:38.168769Z",
    "carPlate": null,
    "octopusNumber": null,
    "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
    "id": "2fb9759a-bcfd-4640-8d3e-951cec4da1a9",
    "name": null
  },
  {
```

```
    "status": 0,
    "statusTime": "2021-05-27T07:58:22.575465Z",
    "carPlate": null,
    "octopusNumber": null,
    "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
    "id": "36d4b7bc-9fcb-4f8f-acb0-441284a9b214",
    "name": null
  },
  {
    "status": 3,
    "statusTime": "2021-05-27T07:55:08.39195Z",
    "carPlate": null,
    "octopusNumber": "888889",
    "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
    "id": "44f055e2-955a-4ae7-9c9d-7fbd41d660fe",
    "name": null
  },
  {
    "status": 1,
    "statusTime": "2021-05-27T07:54:38.620162Z",
    "carPlate": null,
    "octopusNumber": null,
    "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
    "id": "7ef48cf7-cb6b-4b9c-afeb-933fffc03591",
    "name": null
  },
  {
    "status": 0,
    "statusTime": "2021-05-27T07:41:12.063496Z",
    "carPlate": null,
    "octopusNumber": null,
    "carEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
    "id": "aa325cc6-2a1a-4f8f-bc8d-19e76efd51d5",
    "name": null
  }
],
"pageIndex": 1,
"totalPages": 24,
"count": 356,
"pageSize": 15,
"hasPreviousPage": false,
"hasNextPage": true
}
```

Response headers

Status Code	Desc	System Message
0	ready to entry/exit	Gate Close, Ready for Enter/Exit
1	Polling	Please place octopus card
2	Octopus Success	Card Valid
3	Octopus Fail	Reason: -Fund insufficient -Card Number Different -Card Invalid
4	Gate Open	Gate Opened
5	Car Entered/Exited	Car has entered/exited

6	Manual Open	Manual Open

Data Update through SignalR Path: /dashboard-hub
Method Name: CarEntranceHistoryMessage

Sample Json

```
[{
                "Status": 3,
                "StatusTime": "2021-07-29T07:28:37.484082",
                "CarPlate": null,
                "OctopusNumber": null,
                "CarEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
                "EntranceName": "Entry-Test",
                "Id": "526a087f-0038-45ae-8ce9-5807f416ad53",
                "Name": null
        }, {
                "Status": 1,
                "StatusTime": "2021-07-29T07:27:36.304246",
                "CarPlate": null,
                "OctopusNumber": null,
                "CarEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
                "EntranceName": "Entry-Test",
                "Id": "3438b9fb-b9b6-4691-a325-dcae85d03d3d",
                "Name": null
        }, {
                "Status": 0,
                "StatusTime": "2021-07-29T05:43:19.120836",
                "CarPlate": null,
                "OctopusNumber": null,
                "CarEntranceId": "c61fd54c-5b8f-405b-9777-a56d073a5cf6",
                "EntranceName": "Entry-Test",
                "Id": "d6b15ef9-cf63-4fab-91ca-8cc244318023",
                "Name": null
        }]
```

e. Sample Input Json for Gate Manual Open

Request API path: not ready

```
{
 "connectorId": "1111-2222-3333-4444",
 "Output": "ManualOpen",
 "Message": "Emergnecy"
}
```