*Work Space Management Application Documentation*

Summary:

Application will be developed using .Net Core 3 at the server side.

Server side will be splitted to 3 tiers: model, business logic(services) and Api(Controllers).

Client Side will be developed using Angular 9 framework.

Database: MongoDb

Database Structure:

Database: **WorkSpaceDb**

Collections:

* Companies:

Structure:

{

\_id: ObjectId,

companyName: String,

quantityOfWorkingSlots: int,

quantityOfEmployees:int

}

* Employees:

Structure:

{

\_id: ObjectId,

fullName: String,

companyId:ObjectId, (One-to-One Relationship with Companie collection),

}

* Orders

Structure:

{

\_id: ObjectId,

startDate:Date,

endDate:Date,

employeeId:ObjectId (One-to-One Relationship with Employees collection),

workStationId:ObjectId (One-to-One Relationship with WorkStations collection),

}

* Workstations:

Structure:

{

\_id: ObjectId,

status: String,

companyId:ObjectId, (One-to-One Relationship with Companie collection),

}

Api:

Controllers:

* OrdersController

Actions:

**GetAvailiableSlots()**

Params: CompanyId, DateFrom, DateTo

Search for available work spaces by company Id and Date Range

**OrderWorkSpace()**.

Params: CompanyId, DateFrom, DateTo, WorkStationId

Creates new record in the Orders collection

**OrderSlotRecursive() -** not developed

**ShowPreviousOrders()**

Params: CompanyId, EmployeeId

Get previous work space bookings, of current company

and Employee

**GetCompanies()**

Get list of all companies from the Companies collection,

User chooses his company in the front-end and sets his

company id

* ManagerController:

Actions:

**ShowSlotsSummary()** - Show booked and available slots

Params: CompanyId,

**UpdateAvailiableSlotsQuantity():**

Params: CompanyId, newQuantity

Update the quantityOfWorkingSlots property in the company from the Companies Collection

**AddNewEmployee() :**

Params: Object Employee,

Add New employee to the current company (insert to the Employees collection )

**RemoveEmployee**()

Params: EmployeeId

Remove employee from the Employees collection.