1) **Posts** : id,title,created_at,updated_at
2) **Paragraphs** : id,sequence_no,text,created_at,updated_at
3) **Comments** : id,comment,created_at,updated_at
4) **Posts to Paragraphs Mapping** : id,post_id,paragraph_id,created_at,updated_at
5) **Paragraphs to Comments Mapping** : id,paragraph_id,comment_id,created_at,updated_at

Logical Flow

- All the post titles will be stored in **posts** table.
- All the paragraph descriptions will be stored in **paragraphs** table.
- All the comments descriptions will be stored in **comments** table.
- All the paragraphs of a respective post mapping details will be stored in **posts to paragraph mapping**.
- All the comments of a respective paragraph will be stored in in **paragraphs to comments mapping**.
- Paragraphs for a post contains sequence_no which indicates the order of the paragraphs for that post.
- All the comments are mapped with the paragraph id which is unique globally.
- In future if we want to add a new paragraph at any place, we just have to increase the sequence number of the remaining paragraphs. So, that all the older comments will be attached with the same paragraph irrespective of the paragraph position.

APIS

Create A Post

Request Type: **POST**

Curl: curl --data "text=this is paragraph-1%0A%0Athis is paragraph-2&title=curl post"
http://localhost/blog/public/index.php/createpost

Ex: http://localhost/blog/public/index.php/createpost Params: text,title

Response:
   successfully created the post

Note: **%0A** is the way to represent new lines through curl call. Please use curl for this request, the way of sending the new line in postman is not working properly.

Get Posts (Limited to 5 each time)

Request Type: **GET**

http://localhost/blog/public/index.php/getposts/{pageNo}
Ex: http://localhost/blog/public/index.php/getposts/1

Response:

Response Description:

1) Outer key represents post id which contains array of objects of paragraphs
2) Each object contains paragraph details along with comments(array of object)
3) Each comment object contains all the comments of that paragraph

```
{
"1": [{
        "postId": "1",
        "title": "Post-1",
        "paragraph": "Paragraph-1",
        "paragraphId": "1",
        "seq_no": "1",
        "comments": [{
                "paragraphId": "1",
                "comment": "Comment-1"
        }, {
                "paragraphId": "1",
                "comment": "Comment-21"
        }, {
                "paragraphId": "1",
                "comment": "new comment"
        }]
}, {
        "postId": "1",
        "title": "Post-1",
        "paragraph": "this is new paragraph for post-1",
        "paragraphId": "25",
        "seq_no": "2",
        "comments": [{
                "paragraphId": "25",
                "comment": null
        }]
}, {
        "postId": "1",
        "title": "Post-1",
        "paragraph": "Paragraph-2",
        "paragraphId": "2",
        "seq_no": "3",
        "comments": [{
                "paragraphId": "2",
                "comment": "Comment-2"
        }, {
                "paragraphId": "2",
```

```
                    "comment": "Comment-22"
            }]
    }, {
            "postId": "1",
            "title": "Post-1",
            "paragraph": "Paragraph-3",
            "paragraphId": "3",
            "seq_no": "4",
            "comments": [{
                    "paragraphId": "3",
                    "comment": "Comment-3"
            }, {
                    "paragraphId": "3",
                    "comment": "Comment-23"
            }]
    }, {
            "postId": "1",
            "title": "Post-1",
            "paragraph": "Paragraph-4",
            "paragraphId": "4",
            "seq_no": "5",
            "comments": [{
                    "paragraphId": "4",
                    "comment": "Comment-4"
            }, {
                    "paragraphId": "4",
                    "comment": "Comment-24"
            }]
    }],
    "2": [{
            "postId": "2",
            "title": "Post-2",
            "paragraph": "Paragraph-1",
            "paragraphId": "5",
            "seq_no": "1",
            "comments": [{
                    "paragraphId": "5",
                    "comment": "Comment-5"
            }, {
                    "paragraphId": "5",
                    "comment": "Comment-25"
            }]
    }, {
            "postId": "2",
            "title": "Post-2",
            "paragraph": "Paragraph-2",
            "paragraphId": "6",
            "seq_no": "2",
            "comments": [{
                    "paragraphId": "6",
                    "comment": "Comment-6"
            }, {
```

```json
                "paragraphId": "6",
                "comment": "Comment-26"
        }]
}, {
        "postId": "2",
        "title": "Post-2",
        "paragraph": "Paragraph-3",
        "paragraphId": "7",
        "seq_no": "3",
        "comments": [{
                "paragraphId": "7",
                "comment": "Comment-7"
        }, {
                "paragraphId": "7",
                "comment": "Comment-27"
        }]
}, {
        "postId": "2",
        "title": "Post-2",
        "paragraph": "Paragraph-4",
        "paragraphId": "8",
        "seq_no": "4",
        "comments": [{
                "paragraphId": "8",
                "comment": "Comment-8"
        }, {
                "paragraphId": "8",
                "comment": "Comment-28"
        }]
}, {
        "postId": "2",
        "title": "Post-2",
        "paragraph": "Paragraph-5",
        "paragraphId": "9",
        "seq_no": "5",
        "comments": [{
                "paragraphId": "9",
                "comment": "Comment-9"
        }, {
                "paragraphId": "9",
                "comment": "Comment-29"
        }]
}],
"3": [{
        "postId": "3",
        "title": "Post-3",
        "paragraph": "Paragraph-1",
        "paragraphId": "10",
        "seq_no": "1",
        "comments": [{
                "paragraphId": "10",
                "comment": "Comment-10"
```

```
        }, {
                "paragraphId": "10",
                "comment": "Comment-30"
        }]
}],
"4": [{
        "postId": "4",
        "title": "Post-4",
        "paragraph": "Paragraph-1",
        "paragraphId": "11",
        "seq_no": "1",
        "comments": [{
                "paragraphId": "11",
                "comment": "Comment-11"
        }, {
                "paragraphId": "11",
                "comment": "Comment-31"
        }]
}, {
        "postId": "4",
        "title": "Post-4",
        "paragraph": "Paragraph-2",
        "paragraphId": "12",
        "seq_no": "2",
        "comments": [{
                "paragraphId": "12",
                "comment": "Comment-12"
        }, {
                "paragraphId": "12",
                "comment": "Comment-32"
        }]
}],
"5": [{
        "postId": "5",
        "title": "Post-5",
        "paragraph": "Paragraph-1",
        "paragraphId": "13",
        "seq_no": "1",
        "comments": [{
                "paragraphId": "13",
                "comment": "Comment-13"
        }, {
                "paragraphId": "13",
                "comment": "Comment-33"
        }]
}, {
        "postId": "5",
        "title": "Post-5",
        "paragraph": "Paragraph-2",
        "paragraphId": "14",
        "seq_no": "2",
        "comments": [{
```

```
                "paragraphId": "14",
                "comment": "Comment-14"
        }, {
                "paragraphId": "14",
                "comment": "Comment-34"
        }, {
                "paragraphId": "14",
                "comment": "Comment-35"
        }, {
                "paragraphId": "14",
                "comment": "Comment-36"
        }, {
                "paragraphId": "14",
                "comment": "Comment-37"
        }, {
                "paragraphId": "14",
                "comment": "Comment-38"
        }, {
                "paragraphId": "14",
                "comment": "Comment-39"
        }, {
                "paragraphId": "14",
                "comment": "Comment-40"
        }]
    }, {
        "postId": "5",
        "title": "Post-5",
        "paragraph": "Paragraph-3",
        "paragraphId": "15",
        "seq_no": "3",
        "comments": [{
                "paragraphId": "15",
                "comment": "Comment-15"
        }]
    }, {
        "postId": "5",
        "title": "Post-5",
        "paragraph": "Paragraph-4",
        "paragraphId": "16",
        "seq_no": "4",
        "comments": [{
                "paragraphId": "16",
                "comment": "Comment-16"
        }]
    }]
}
```

Get Paragraphs & Comments Of A Post

Request Type: **GET**

http://localhost/blog/public/index.php/getparagraphs/{postId}
Ex: http://localhost/blog/public/index.php/getparagraphs/1

Response:

Response Description:

1) Outer keys contains post details like post Id,title,text(array of objects)
2) Outer key of the text object represents id of the paragraph
3) Each text object contains array of objects with all the comments

```
{
"postId": "1",
"title": "Post-1",
"text": {
        "1": [{
                "paragraphId": "1",
                "seq_no": "1",
                "text": "Paragraph-1",
                "comment": "Comment-1"
        }, {
                "paragraphId": "1",
                "seq_no": "1",
                "text": "Paragraph-1",
                "comment": "Comment-21"
        }, {
                "paragraphId": "1",
                "seq_no": "1",
                "text": "Paragraph-1",
                "comment": "new comment"
        }],
        "25": [{
                "paragraphId": "25",
                "seq_no": "2",
                "text": "this is new paragraph for post-1",
                "comment": null
        }],
        "2": [{
                "paragraphId": "2",
                "seq_no": "3",
                "text": "Paragraph-2",
                "comment": "Comment-2"
        }, {
                "paragraphId": "2",
                "seq_no": "3",
                "text": "Paragraph-2",
                "comment": "Comment-22"
        }],
        "3": [{
```

```
                "paragraphId": "3",
                "seq_no": "4",
                "text": "Paragraph-3",
                "comment": "Comment-3"
        }, {

                "paragraphId": "3",
                "seq_no": "4",
                "text": "Paragraph-3",
                "comment": "Comment-23"
        }],
        "4": [{
                "paragraphId": "4",
                "seq_no": "5",
                "text": "Paragraph-4",
                "comment": "Comment-4"
        }, {

                "paragraphId": "4",
                "seq_no": "5",
                "text": "Paragraph-4",
                "comment": "Comment-24"
        }]
    }
}
```

Add Comment On A Paragraph

Request Type: **POST**

> http://localhost/blog/public/index.php/addcomment
> Params: paragraph_id & comment description
> Ex: http://localhost/blog/public/index.php/addcomment
> data:{paragraph_id:1,comment:'comment'}

Reseponse:

> comment have been added successfully

Add A New Paragraph For A Post

Request Type: **POST**

> http://localhost/blog/public/index.php/addparagraph
> Params: post_id & seq_no & text
> Ex: http://localhost/blog/public/index.php/addparagraph
> data:{post_id:1,seq_no:2,text:'new paragra'}

Reseponse:

> Paragraph have been added successfully

Note: seq_no parameter represents the position of the new paragraph in the post