#### Assignment -4

An API to fetch all fees paid by a student
 An API to pay fees for a student

Fee Service Controller having two services /details and /pay

```
🗎 StudentService.java 🥒 application.yml 🔛 Studentmanagemen...
                                                   ■ studentmanagemen... 

☐ StudentController.j... ☐ Student.jav
 4 package com.eduexcel.fee.controller;
 6⊕ import java.util.List; ...
19
200/**
21 * @author Jagadeesht
22 *
23 */
24
25 @RestController
26 @RequestMapping("/fee")
27 public class FeeController {
289
       @Autowired
29
       FeeService feeService;
       @GetMapping("/details/{student_id}")
31⊖
32
       @ResponseBody
       public List<Fees> getFeeDetails(@PathVariable("student_id") Long student_id) {
33
           return feeService.getFeeDetails(student_id);
34
35
36
37⊝
       @PostMapping("/pay")
38
       @ResponseBody
39
       public Fees pay(@RequestBody Fees fee) {
           System.out.println("pay fee...");
40
41
           return feeService.pay(fee);
42
43
44 }
45
```

## FeeService

```
☑ StudentServi... 
Ø application.yml ② Studentmanag... 
☑ studentmanag... ② StudentContr... ② Student.java
 4 package com.eduexcel.fee.services;
 6 import java.time.Instant;
18 * @author Jagadeesht
19 *
20 */
21 @Service
22 public class FeeService {
240
        @Autowired
       private FeeRepository feeRepository;
27⊖
       public List<Fees> getFeeDetails(@PathVariable("student_id") Long student_id) {
28
29
            return feeRepository.findByStudentId(student_id);
30
       }
31
32⊜
        @Transactional
 33
       public Fees pay(Fees fee) {
            fee.setDate(Instant.now().toString());
            return feeRepository.save(fee);
 36
        }
```

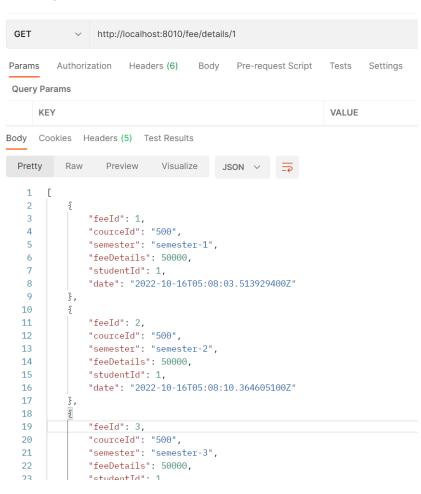
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```
39 }
40
```

## FeeRepository

#### Result for fee details

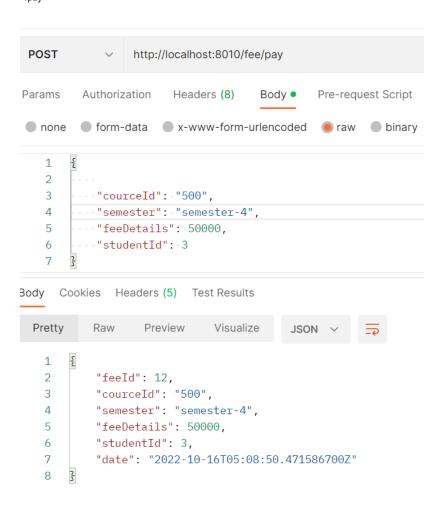
#### Feemanagement / feedetails



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```
studentiu . i,
24
             "date": "2022-10-16T05:08:14.082061700Z"
25
         3,
26
27
             "feeId": 4,
28
             "courceId": "500",
29
             "semester": "semester-4",
             "feeDetails": 50000,
30
             "studentId": 1,
31
32
             "date": "2022-10-16T05:08:18.086052300Z"
```

/pay



Updated Student API to invoke the fee management service APIs

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```
© suddencery... □ suddenunding... □ suddenundings... □ suddenucon... △ □ suddenugava □ reecondom... 4 package com.equexcei.studentmanagement;
  6 mport java.util.List;□
21
22e/**
23 * @author Jagadeesht
24 *
25 */
 26 @RestController
 27 public class StudentController {
        @Autowired
        private StudentService studentService;
        @GetMapping("/students")
34
35
36
37
38
39
40
41
42
43
44
45
46
        public List<Student> getStudents() {
            return studentService.getStudents();
        @GetMapping("/student/{id}")
        return studentService.getStudent(studentid);
}
        public Student getStudents(@PathVariable("id") Long studentid) {
        @PostMapping("/student")
        public Student createStudents(@RequestBody Student student) {
$47
48
49
500
51
52
53
54
55
560
57
58
            return studentService.createStudent(student);
        @DeleteMapping("/student/{id}")
        public String deleteStudent(@PathVariable("id") Long studentid) {
        @PutMapping("/student")
        public Student updateStudents(@RequestBody Student student) {
            return studentService.updateStudent(student);
         @GetMapping("/feedetail/{id}")
        public List<Fees> getFeeDetails(@PathVariable("id") Long studentid) {
    return studentService.getFeeDetails(studentid);
68
699
70
        @PostMapping("/payfee")
         @ResponseBody
        public Fees pay(@RequestBody Fees fee) {
    return studentService.payFee(fee);
```

## Student Service has Autowired RestTemplate to call Fee management API

```
StudentServ...  

Studentmanag...  

StudentCont...  

Studentjava   

FeeControll...  

FeeServicejava   

FeeReposito...  

FeeReposito.
```

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```
public List<Student> getStudents() {
    return studentRepository.findAll();
}

public Student getStudent(Long stundentId) {
    return studentRepository.findById(stundentId).get();
}

@Transactional
public Student createStudent(Student student) {
    return studentRepository.save(student);
}

@Transactional
public String deleteStudent(Long stundentId) {
    studentRepository.deleteById(stundentId);
    return "deleted Student "+ stundentId;
}

@Transactional
public String deleteStudent(Student student) {
    studentRepository.deleteById(stundentId);
    return "deleted Student "+ stundentId;
}

@Transactional
public Student updateStudent(Student student) {
    return studentRepository.save(student);
}

public Fees payFee(Fees fee) {
    ResponseEntity:Fees> entity = restTemplate.postForEntity(feeServiceUrl+"/pay", fee, Fees.class);
    return entity.getBody();

public List<Fee> getFeeDetails(Long studentid) {
    String url = feeServiceUrl+"/details/"+studentid;
    System.out.println("........"studentid);
    ResponseEntityClist> entity = restTemplate.getForEntity(url,List.class);
    return entity.getBody();
}

return entity.getBody();
}
```

### Test Result

```
StudentManagement / feedetails
GET
            http://localhost:8080/feedetail/1
Params Authorization Headers (6) Body Pre-request Script Tests Settings
Query Params
     KEY
                                                             VALUE
3ody Cookies Headers (5) Test Results
 Pretty
          Raw
                Preview Visualize
                                        JSON ∨
   1
       Е
   2
           £
               "feeId": 1,
   3
               "courceId": "500",
   4
   5
               "semester": "semester-1",
   6
               "feeDetails": 50000,
   7
               "studentId": 1,
               "date": "2022-10-16T05:08:03.513929400Z"
   8
   9
  10
               "feeId": 2,
  11
               "courceId": "500",
  12
  13
               "semester": "semester-2",
  14
               "feeDetails": 50000,
               "studentId": 1,
  15
               "date": "2022-10-16T05:08:10.364605100Z"
  16
  17
           },
  18
           {
  19
               "feeId": 3,
               "courceId": "500",
  20
```

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```
"semester": "semester-3",
Z\bot
22
             "feeDetails": 50000,
             "studentId": 1,
23
            "date": "2022-10-16T05:08:14.082061700Z"
24
25
26
            "feeId": 4,
27
             "courceId": "500",
28
29
             "semester": "semester-4",
             "feeDetails": 50000,
30
             "studentId": 1,
31
            "date": "2022-10-16T05:08:18.086052300Z"
32
```

# /pay -result

# StudentManagement / fee pay



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