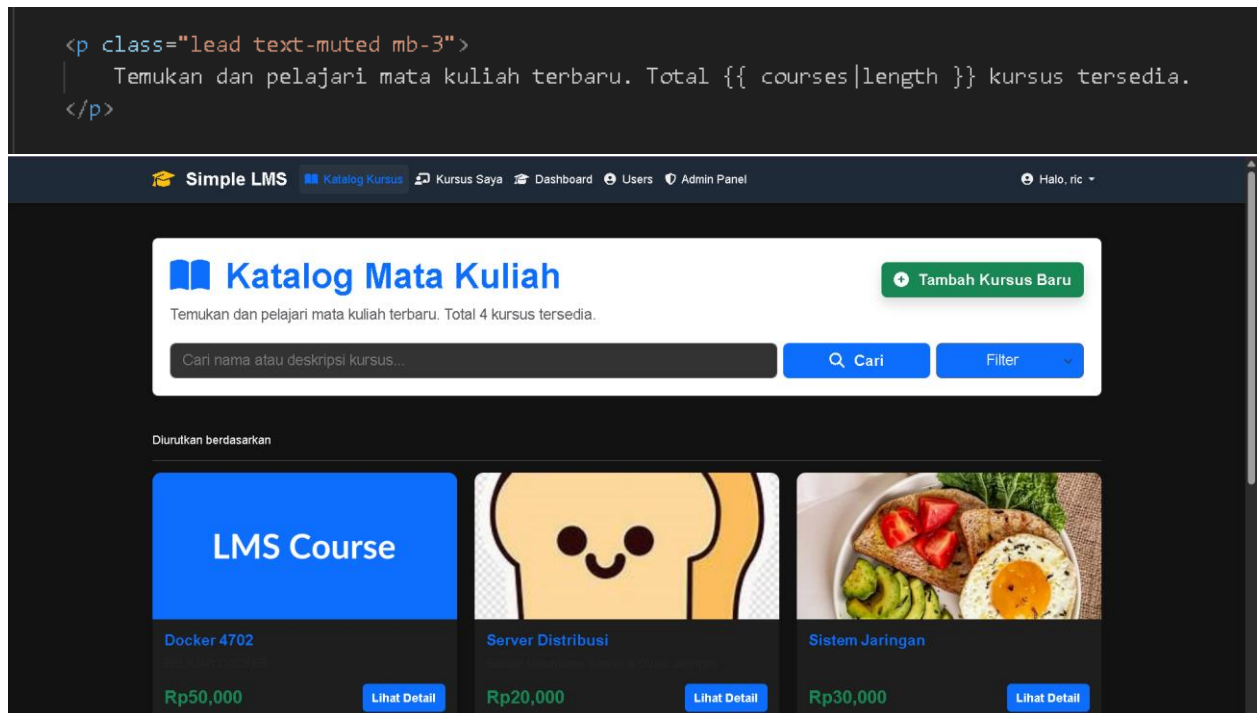Mata Kuliah : Pemrograman Sisi Server – TI – S1

Pertemuan : 7

NIM : A11.2023.14922

Nama : Richard Christoper Subianto

- Statistik Semua Course
  1. Jumlah Semua Course

```
<p class="lead text-muted mb-3">
    Temukan dan pelajari mata kuliah terbaru. Total {{ courses|length }} kursus tersedia.
</p>
```



  2. Filter Course

```
<div class="col-md-2 d-grid">
    <select name="sort" class="form-select form-select-lg text-center bg-primary">
        <option value="">Filter</option>
        <option value="harga_asc" {% if sort == 'harga_asc' %} selected{% endif %}>Harga Termurah</option> <!-- harga termurah -->
        <option value="harga_desc" {% if sort == 'harga_desc' %} selected{% endif %}>Harga Termahal</option> <!-- harga termahal -->
        <option value="member_desc" {% if sort == 'member_desc' %} selected{% endif %}>Terpopuler</option> <!-- member tersedikit -->
        <option value="member_asc" {% if sort == 'member_asc' %} selected{% endif %}>Kurang Diminati</option> <!-- member terbanyak -->
    </select>
</div>
```

Code :

```python
class CourseListView(ListView):
    model = Course
    template_name = 'course/course_list.html'
    context_object_name = 'courses'
    ordering = ['-created_at']

    def get_queryset(self):
        query = self.request.GET.get('q')
        sort_option = self.request.GET.get('sort')
        queryset = super().get_queryset()

        queryset = super().get_queryset().annotate(
            member_count=Count('coursemember', filter=Q(coursemember__roles='std'))
        )

        if query:
            queryset = queryset.filter(
                Q(name__icontains=query) | Q(description__icontains=query)
            )

        if sort_option == 'harga_asc':
            queryset = queryset.order_by('price')
        elif sort_option == 'harga_desc':
            queryset = queryset.order_by('-price')
        elif sort_option == 'member_asc':
            queryset = queryset.order_by('member_count')
        elif sort_option == 'member_desc':
            queryset = queryset.order_by('-member_count')

        return queryset

    def get_context_data(self, **kwargs):
        context = super().get_context_data(**kwargs)

        sort_option = self.request.GET.get('sort')
        query = self.request.GET.get('q')

        context['query'] = query
        context['sort'] = sort_option

        context['sort_message'] = None
        if sort_option == 'harga_asc':
            context['sort_message'] = 'Harga Termurah'
        elif sort_option == 'harga_desc':
            context['sort_message'] = 'Harga Termahal'
        elif sort_option == 'member_asc':
            context['sort_message'] = 'Jumlah Member Paling Sedikit'
        elif sort_option == 'member_desc':
            context['sort_message'] = 'Jumlah Member Paling Banyak'

        return context
```

## 📖 Katalog Mata Kuliah

⊕ Tambah Kursus Baru

Temukan dan pelajari mata kuliah terbaru. Total 4 kursus tersedia.

Cari nama atau deskripsi kursus...    🔍 Cari    Filter ⌄

Filter
Harga Termurah
Harga Termahal
Terpopuler
Kurang Diminati

Diurutkan berdasarkan

LMS Course

---

## 📖 Katalog Mata Kuliah

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Temukan dan pelajari mata kuliah terbaru. Total 4 kursus tersedia.

Cari nama atau deskripsi kursus...    🔍 Cari    Harga Termurah

Diurutkan berdasarkan

Server Distribusi
Rp20,000    Lihat Detail
✎ Edit    🗑 Hapus

Sistem Jaringan
Rp30,000    Lihat Detail
✎ Edit    🗑 Hapus

PSS
Rp30,000    Lihat Detail
✎ Edit    🗑 Hapus

LMS Course
Docker 4702
Rp50,000    Lihat Detail
✎ Edit    🗑 Hapus

---

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Cari nama atau deskripsi kursus...    🔍 Cari    Harga Termahal

Diurutkan berdasarkan

Docker 4702
Rp50,000    Lihat Detail
✎ Edit    🗑 Hapus

Sistem Jaringan
Rp30,000    Lihat Detail
✎ Edit    🗑 Hapus

PSS
Rp30,000    Lihat Detail
✎ Edit    🗑 Hapus

Server Distribusi
Rp20,000    Lihat Detail
✎ Edit    🗑 Hapus

---

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Cari nama atau deskripsi kursus...    🔍 Cari    Terpopuler

Diurutkan berdasarkan

Server Distribusi
Rp20,000    Lihat Detail
✎ Edit    🗑 Hapus

Sistem Jaringan
Rp30,000    Lihat Detail
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Rp30,000    Lihat Detail
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---

## 📖 Katalog Mata Kuliah

⊕ Tambah Kursus Baru

Temukan dan pelajari mata kuliah terbaru. Total 4 kursus tersedia.

Cari nama atau deskripsi kursus...    🔍 Cari    Kurang Diminati

Diurutkan berdasarkan

PSS
Rp30,000    Lihat Detail
✎ Edit    🗑 Hapus

Sistem Jaringan
Rp30,000    Lihat Detail
✎ Edit    🗑 Hapus

Docker 4702
Rp50,000    Lihat Detail
✎ Edit    🗑 Hapus

Server Distribusi
Rp20,000    Lihat Detail
✎ Edit    🗑 Hapus

- Detail Statistik Course

```python
# TABLE COURSE ()
class Course(models.Model):
    teacher = models.ForeignKey(User, on_delete=models.RESTRICT, verbose_name="pengajar")

    name = models.CharField("nama matkul", max_length=100)
    description = models.TextField("deskripsi", default='-')
    price = models.IntegerField("harga", default=10000)
    image = models.ImageField("gambar", upload_to='course_images/', null=True, blank=True)

    created_at = models.DateTimeField(auto_now_add=True)
    updated_at = models.DateTimeField(auto_now=True)

    class Meta:
        verbose_name = "Mata Kuliah"
        verbose_name_plural = "Mata Kuliah"

    def student_count(self):
        return CourseMember.objects.filter(course_id=self, roles='std').count()
    def content_count(self):
        return self.contents.count()
    def comment_count(self):
        return Comment.objects.filter(content_id__course_id=self).count()
    def content_count(self):
        return CourseContent.objects.filter(course_id=self).count()

    def __str__(self) -> str:
        return f"{self.name} : Rp{self.price:,}"
```

Code:
{% extends "base.html" %}
{% load humanize %}

{% block title %}{{ course.name }}{% endblock %}

{% block content %}
<div class="row">
  <div class="col-lg-8">
    <div class="card shadow-lg mb-4 border-0">
      <div class="card-body p-4">
        <h1 class="card-title text-primary display-4">{{ course.name }}</h1>
        <p class="lead text-white">
          Diajarkan oleh: <span class="fw-semibold text-light">{{ course.teacher.username }}</span>
        </p>

        <h2 class="mt-4 mb-3 fs-5 text-uppercase text-secondary">Tentang Kursus</h2>
        <div class="p-3 bg-light rounded mb-4 text-muted">
          <p>{{ course.description|linebreaks }}</p>
        </div>

```html
            <div class="d-flex align-items-center mb-4 p-3 bg-info bg-opacity-10 border border-info
rounded">
                <i class="fas fa-book-open fa-2x text-info me-3"></i>
                <div>
                    <h4 class="mb-0 text-info">Total Materi:</h4>
                    <p class="mb-0 fs-4 fw-bold text-dark">
                        <span class="badge bg-info ms-2">Konten: {{ course.content_count }}</span>
                    </p>
                </div>
            </div>

            <div class="d-flex justify-content-between align-items-center mt-5 p-3 border-top">
                <h2 class="text-success fw-bold mb-0 display-6">
                    Rp{{ course.price|intcomma }}
                </h2>

                {% if user.is_authenticated %}
                {% if is_joined %}
                <a href="{% url 'course_content_list' course.pk %}" class="btn btn-success btn-lg">
                    <i class="fas fa-check-circle"></i> Akses Kursus
                </a>
                {% else %}
                <a href="{% url 'join_course' course.pk %}" class="btn btn-primary btn-lg">
                    <i class="fas fa-plus-circle"></i> Daftar Kursus Sekarang
                </a>
                {% endif %}
                {% else %}
                <a href="{% url 'login' %}?next={% url 'course_detail' course.pk %}" class="btn btn-
warning btn-lg">
                    <i class="fas fa-sign-in-alt"></i> Login untuk Mendaftar
                </a>
                {% endif %}
            </div>
        </div>
    </div>
  </div>

  <div class="col-lg-4">
    <div class="card shadow-sm sticky-top" style="top: 20px;">
      {% if course.image %}
      <img src="{{ course.image.url }}" class="card-img-top object-fit-cover" alt="{{
course.name }}"
        style="height: 250px;">
```
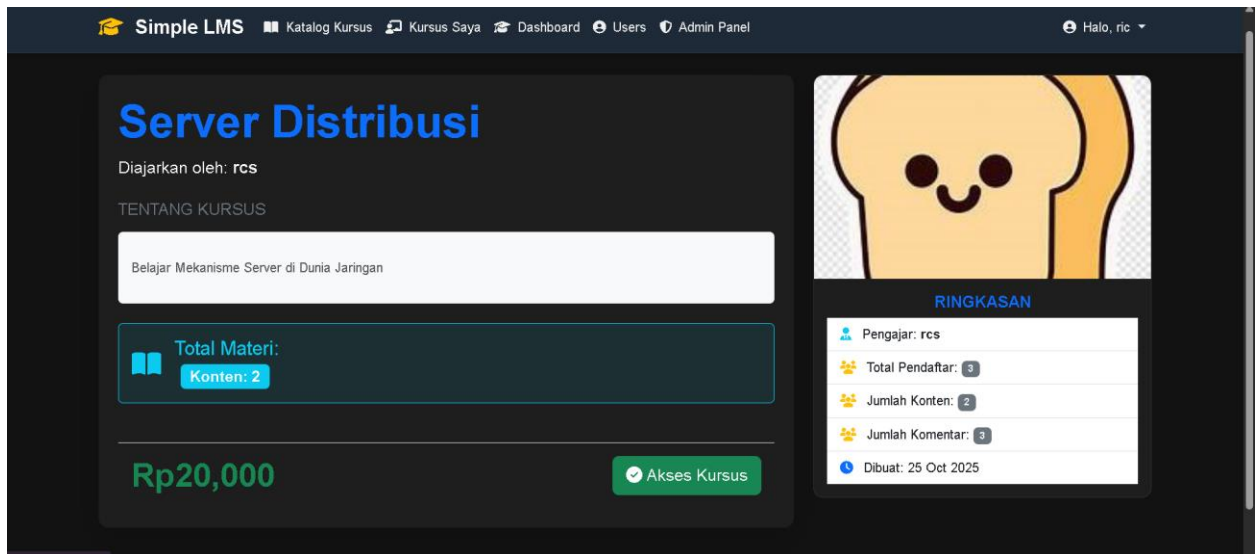
```
{% else %}
<div class="p-5 text-center bg-secondary-subtle fs-4 fw-semibold text-muted">Gambar
Tidak Ada</div>
{% endif %}
<div class="card-body">
    <h5 class="card-title text-center text-secondary fw-bold">RINGKASAN</h5>
    <ul class="list-group list-group-flush">
       <li class="list-group-item">
          <i class="fas fa-user-tie me-2 text-info"></i> Pengajar: <span
             class="fw-semibold">{{course.teacher.username }}</span>
       </li>
       <li class="list-group-item">
          <i class="fas fa-users me-2 text-warning"></i> Total Pendaftar: <span
             class="badge bg-secondary">{{ course.coursemember_set.count }}</span>
       </li>
       <li class="list-group-item">
          <i class="fas fa-users me-2 text-warning"></i> Jumlah Konten: <span
             class="badge bg-secondary">{{ course.content_count }}</span>
       </li>
       <li class="list-group-item">
          <i class="fas fa-users me-2 text-warning"></i> Jumlah Komentar: <span
             class="badge bg-secondary">{{ course.comment_count }}</span>
       </li>
       <li class="list-group-item">
          <i class="fas fa-clock me-2 text-primary"></i> Dibuat: {{ course.created_at|date:"d
M Y" }}
       </li>
    </ul>
</div>
</div>
</div>
</div>
{% endblock content %}
```
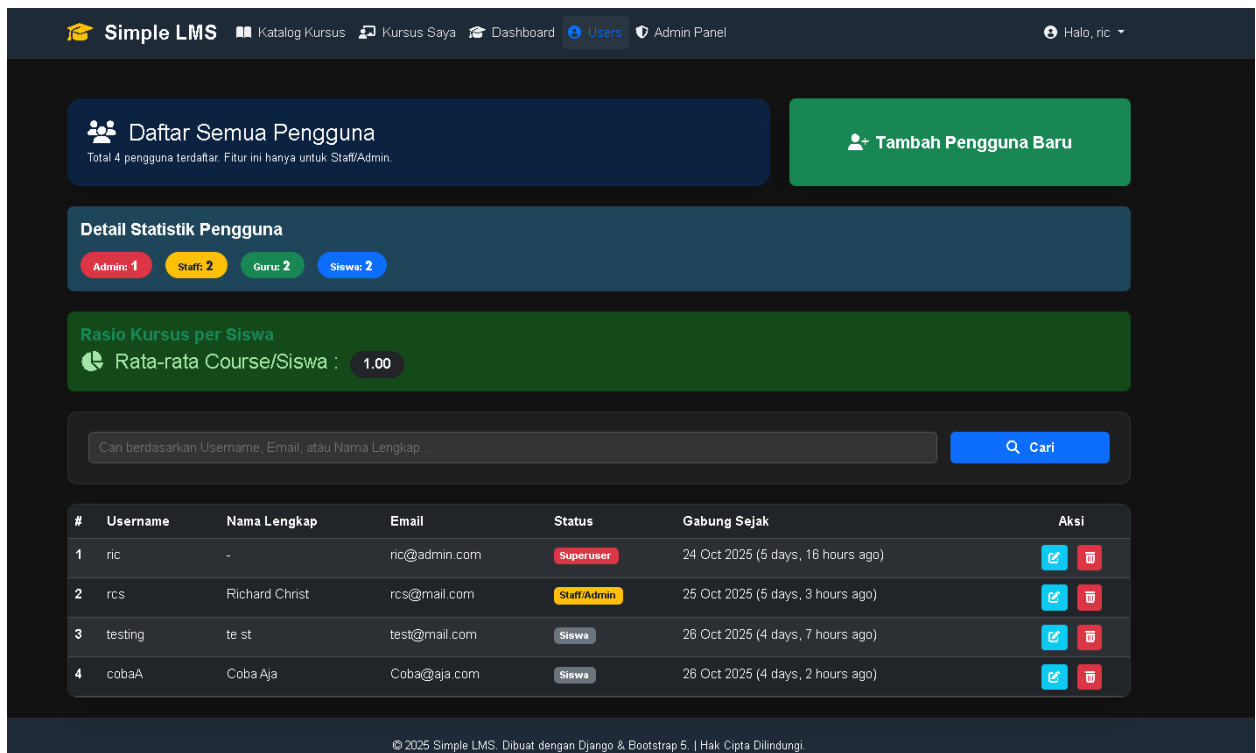
Hasil :



- Statistik Semua User

```python
@user_passes_test(is_staff_or_superuser)
@login_required
def users(request):
    query = request.GET.get('q')
    if query:
        myusers = User.objects.filter(
            Q(username__icontains=query) |
            Q(first_name__icontains=query) |
            Q(last_name__icontains=query) |
            Q(email__icontains=query)
        ).distinct().order_by('date_joined')
        message = f"Menampilkan hasil pencarian untuk: '{query}'"
    else:
        myusers = User.objects.all().order_by('date_joined')
        message = ""

    admin = User.objects.filter(is_superuser=True).count()
    staff = User.objects.filter(is_staff=True).count()
    siswa = User.objects.filter(is_staff=False, is_superuser = False).count()
    teacher = User.objects.filter(course__isnull=False).distinct().count()
    Tcourse = CourseMember.objects.values('course_id').distinct().count()
    Tmember = CourseMember.objects.filter(roles = 'std').values('user_id').distinct().count()
    rata2 = Tcourse/Tmember
    context = {
        'myusers': myusers,
        'query': query,
        'search_message': message,
        'total_users': User.objects.all().count(),
        'admin': admin,
        'staff': staff,
        'siswa': siswa,
        'teacher': teacher,
        'rata2': rata2,
    }
    return render(request, 'user/all_users.html', context)
```

- Detail Statistik User

```python
@login_required
def user_dashboard(request):
    user = request.user

    if user.is_staff:
        course_memberships = CourseMember.objects.filter(user_id=user)
        jumlah = Course.objects.filter(teacher=request.user).count()
        member = CourseMember.objects.filter(user_id=user)
        komen = Comment.objects.filter(member_id__in=member).count()
        context = {
            'is_teacher': True,
            'courses': course_memberships,
            'jumlah': jumlah,
            'komen': komen
        }
        return render(request, 'completion/dashboard.html', context)
```

# 🏠 Dashboard Kamu

Selamat datang di ruang belajar interaktifmu! Keaktifan : 3 komentar diposting

## Kelas yang Anda Ajar / Kelola : 2



### Sistem Jaringan

Jumlah Anggota : 1

**Lihat Konten**



### Server Distribusi

Jumlah Anggota : 3

**Lihat Konten**