HR Portal Development Guide

From Departments Module Onward

🏗️ PHASE 3: Create Page Components (45 minutes)

Step 3.2: Create Departments Pages

```bash
ng generate component pages/departments/department-list --standalone
ng generate component pages/departments/department-form --standalone
```

Department List: Display departments in a table with name, manager, employee count, and actions.

Department Form: Create/edit departments with fields: code, name, manager, budget, location.

Mock Data:

```typescript
departments = [
  { id: 1, code: 'IT', name: 'Information Technology', manager: 'Ahmed Ben Ali', employeeCount: 12 },
  { id: 2, code: 'HR', name: 'Human Resources', manager: 'Sara Mansour', employeeCount: 5 }
];
```

Step 3.3: Create Leaves Pages

```bash
ng generate component pages/leaves/leave-list --standalone
ng generate component pages/leaves/leave-detail --standalone
ng generate component pages/leaves/leave-calendar --standalone
ng generate component pages/leaves/leave-types --standalone
```

Leave List: Table showing leave requests with status badges (Approved/Pending/Rejected).

Leave Detail: Full leave information with approval/rejection details.

Leave Calendar: Visual calendar showing who's on leave (monthly view).

Leave Types: Configure leave types (Annual, Sick, Maternity) with days allocated.

Mock Data:

```typescript
leaves = [
  { id: 1, employee: 'Ahmed Ben Ali', type: 'Annual', from: '2024-03-15', to: '2024-03-20', days: 5, status: 'Approved' },
  { id: 2, employee: 'Sara Mansour', type: 'Sick', from: '2024-03-10', to: '2024-03-12', days: 2, status: 'Pending' }
];
```

Step 3.4: Create Documents Pages

```bash
ng generate component pages/documents/document-list --standalone
ng generate component pages/documents/document-upload --standalone
ng generate component pages/documents/document-detail --standalone
```

Document List: Table with file name, type, uploaded by, date. Include file type icons (PDF, Word, Excel).

Document Upload: Form to upload files with type, category, related employee, and description.

Document Detail: View document info and metadata with download/edit actions.

Mock Data:

```typescript
documents = [
  { id: 1, name: 'Contract_Ahmed.pdf', type: 'Contract', size: '245 KB', uploadedBy: 'HR', date: '2024-01-15' },
  { id: 2, name: 'Payslip_March.pdf', type: 'Payslip', size: '1.2 MB', uploadedBy: 'Finance', date: '2024-03-01' }
];
```

Step 3.5: Create AI Page

```bash
ng generate component pages/ai/ai-chat --standalone
```

AI Chat: Chat interface with message history. User messages on right (orange), AI on left (gray).

Features: Input field, send button, auto-scroll, mock AI responses.

Mock Data:

```typescript
messages = [
  { from: 'ai', text: 'Hello! How can I help you?', time: '10:00' },
  { from: 'user', text: 'How many leave days do employees have?', time: '10:30' },
  { from: 'ai', text: 'Employees have 21 annual leave days per year.', time: '10:30' }
];
```

Step 3.6: Create Settings Pages

```bash
ng generate component pages/settings/users --standalone
ng generate component pages/settings/roles --standalone
```

Users Page: Table of system users with username, email, role, status, last login.

Roles Page: Display roles (Admin, Manager, Employee) with permissions listed.

Mock Data:

```typescript
users = [
  { id: 1, username: 'ahmed.benali', email: 'ahmed@company.com', role: 'Manager', status: 'Active' },
  { id: 2, username: 'sara.mansour', email: 'sara@company.com', role: 'Admin', status: 'Active' }
];

roles = [
  { id: 1, name: 'Admin', userCount: 2, permissions: ['manage_users', 'manage_roles', 'approve_all_leaves'] },
  { id: 2, name: 'Manager', userCount: 4, permissions: ['view_employees', 'approve_department_leaves'] }
];
```

🧭 PHASE 4: Configure Routing (30 minutes)

Update app.routes.ts

Import all components:

```typescript
import { DepartmentListComponent } from './pages/departments/department-list/department-list.component';
import { DepartmentFormComponent } from './pages/departments/department-form/department-form.component';
// ... import all other components
```

Add routes:

```typescript
```

```typescript
export const routes: Routes = [
  // Departments
  {
    path: 'departments',
    children: [
      { path: '', component: DepartmentListComponent },
      { path: 'new', component: DepartmentFormComponent },
      { path: ':id/edit', component: DepartmentFormComponent }
    ]
  },

  // Leaves
  {
    path: 'leaves',
    children: [
      { path: '', component: LeaveListComponent },
      { path: 'calendar', component: LeaveCalendarComponent },
      { path: 'types', component: LeaveTypesComponent },
      { path: ':id', component: LeaveDetailComponent }
    ]
  },

  // Documents
  {
    path: 'documents',
    children: [
      { path: '', component: DocumentListComponent },
      { path: 'upload', component: DocumentUploadComponent },
      { path: ':id', component: DocumentDetailComponent }
    ]
  },

  // AI
  { path: 'ai', component: AiChatComponent },

  // Settings
  {
    path: 'settings',
    children: [
      { path: 'users', component: UsersComponent },
      { path: 'roles', component: RolesComponent }
    ]
```

```
    }
  ];
```

Test routes: Navigate to `/departments`, `/leaves`, `/documents`, `/ai`, `/settings/users`.

🎨 PHASE 5: Orange Branding (20 minutes)

Update tailwind.config.js

```javascript
theme: {
  extend: {
    colors: {
      primary: {
        DEFAULT: '#f97316',
        500: '#f97316',
        600: '#ea580c',
        700: '#c2410c'
      }
    }
  }
}
```

Find & Replace

Search entire `src/` folder:

- `bg-blue-` → `bg-primary-`
- `text-blue-` → `text-primary-`
- `border-blue-` → `border-primary-`
- `hover:bg-blue-` → `hover:bg-primary-`

Restart: `npm start`

Verify: Sidebar, buttons, badges are orange.

🧱 PHASE 6: Build Page UIs (2-3 hours)

For Each Page:

Reuse template components:

- Copy table structure from `pages/tables/`
- Copy form layout from `pages/forms/`
- Use existing card/button components

Add mock data (provided above for each module)

Key Elements:

- Department List: Table + Add button
- Leave List: Table with status badges (green/yellow/red)
- Document List: Table with file icons
- AI Chat: Message bubbles (user right/orange, AI left/gray)
- Users: Table with role badges
- Roles: Cards or table with permissions

Test each page: Check layout, buttons, data displays correctly.

🤖 PHASE 7: AI Chat Details (45 minutes)

Component Code

```typescript
```

```
export class AiChatComponent {
  messages = [/* mock messages */];
  newMessage = ';

  sendMessage() {
    if (this.newMessage.trim()) {
      this.messages.push({ from: 'user', text: this.newMessage, time: 'Now' });

      setTimeout(() => {
        this.messages.push({ from: 'ai', text: 'Mock AI response...', time: 'Now' });
      }, 1000);

      this.newMessage = ';
    }
  }
}
```

HTML Layout

```html
html
```

```html
<div class="rounded-sm border bg-white shadow-default">
  <div class="px-7 py-4 border-b">
    <h3>AI HR Assistant</h3>
  </div>

  <div class="h-[500px] overflow-y-auto p-7">
    <div *ngFor="let msg of messages">
      <!-- AI message (left, gray) -->
      <div *ngIf="msg.from === 'ai'" class="flex gap-3 mb-4">
        <div class="bg-primary rounded-full w-10 h-10"></div>
        <div class="bg-gray-2 rounded-lg p-4">{{msg.text}}</div>
      </div>

      <!-- User message (right, orange) -->
      <div *ngIf="msg.from === 'user'" class="flex gap-3 mb-4 flex-row-reverse">
        <div class="bg-meta-3 rounded-full w-10 h-10"></div>
        <div class="bg-primary text-white rounded-lg p-4">{{msg.text}}</div>
      </div>
    </div>
  </div>

  <div class="px-7 py-4 border-t">
    <div class="flex gap-4">
      <input [(ngModel)]="newMessage" (keyup.enter)="sendMessage()"
          class="flex-1 rounded border px-5 py-3" placeholder="Type...">
      <button (click)="sendMessage()" class="bg-primary text-white px-6 py-3 rounded">
        Send
      </button>
    </div>
  </div>
</div>
```

🪩 PHASE 8: Clean & Polish (1 hour)

Update Sidebar

Find sidebar component and update menu:

```typescript
typescript
```

```
menuItems = [
  { title: 'Dashboard', icon: 'grid', route: '/dashboard' },
  { title: 'Employees', icon: 'users', route: '/employees' },
  { title: 'Departments', icon: 'briefcase', route: '/departments' },
  { title: 'Leaves', icon: 'calendar', route: '/leaves' },
  { title: 'Documents', icon: 'folder', route: '/documents' },
  { title: 'AI Assistant', icon: 'cpu', route: '/ai' },
  { title: 'Settings', icon: 'settings', route: '/settings/users' }
];
```

Delete Demo Pages

Remove unused folders:

- `pages/blank/`
- `pages/calender/`
- `pages/charts/`
- `pages/invoices/`
- `pages/ui-elements/`

Add Breadcrumbs

Add to each page header:

```html
html

<div class="mb-6">
  <h2>Employees</h2>
  <nav class="text-sm text-gray-500">Home > Employees</nav>
</div>
```

Final Checks

- ☐ All routes work
- ☐ Orange theme throughout
- ☐ No broken links
- ☐ Sidebar updated
- ☐ Demo pages removed
- ☐ No console errors
- ☐ Mobile responsive

▓ FINAL RESULT

☑ 6 functional modules (Employees, Departments, Leaves, Documents, AI, Settings)
☑ Orange-branded UI
☑ Professional page layouts
☑ Mock data displays correctly
☑ Clean codebase
☑ **Jury-ready frontend**

Total Time: ~7 hours

Next Steps: Backend API integration, authentication, deployment