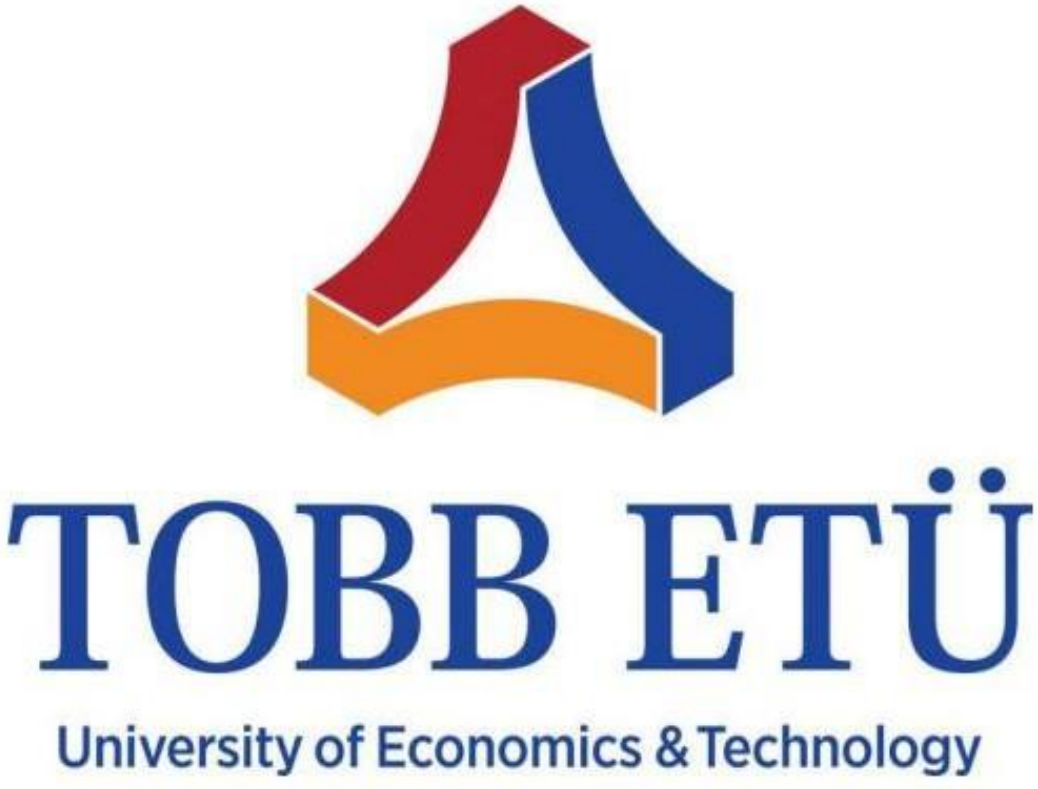
BIL 481 – Acceptance Tests and Criteria



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1. Introduction

This document defines Acceptance Criteria and Acceptance Tests for the four core use cases implemented in the Smart Clinical Appointment System. Each test ensures that functional and non-functional requirements are met before the system is demonstrated.

1.1 Test Methodology

- Test Type: Manual Acceptance Testing
- Test Environment: Local Development (localhost)
- Test Data: Pre-seeded database with clinics, doctors, and schedules (via load_slots.py, load_symptoms.py)
- Success Criteria: All acceptance criteria must pass for test to be marked as PASS.

2. Acceptance Test 1: Patient Registration & Login

2.1 Use Case Description

UC-01: A new patient registers for an account and logs in to access the dashboard.

2.2 Acceptance Criteria

Criteria ID	Acceptance Criterion	Success Indicator
AC-1.1	User can successfully register with valid data (full name, email, password)	User record is created in database with role='patient'.

Criteria ID	Acceptance Criterion	Success Indicator
AC-1.2	System validates email format and uniqueness	Duplicate email shows error message.
AC-1.3	Password is securely hashed before storage	Password hash is stored in database (not plaintext).
AC-1.4	JWT access token is generated upon successful login	Token is stored in localStorage.
AC-1.5	User is redirected to correct dashboard based on role	Patient role → /patient/dashboard.
AC-1.6	Success message is displayed after registration	*"Kayıt başarılı! Giriş sayfasına yönlendiriliyorsunuz..."* appears.
AC-1.7	Error messages are displayed for invalid credentials	*"Email veya şifre yanlış"* appears on failed login.

2.3 Traceability

Requirement ID	Design Reference	Implementation
FR1	Section 2.2.2 (Custom User Model)	accounts/models.py
FR2	Section 2.2.2 (JWT Authentication)	accounts/views.py - LoginView
FR1, FR2	Section 2.4.1, 2.4.2 (UI Design)	RegisterPage.jsx, LoginPage.jsx

3. Acceptance Test 2: Direct Polyclinic Selection

3.1 Use Case Description

UC-02: A patient selects a polyclinic directly and verifies their symptoms manually before proceeding to doctor selection.

3.2 Acceptance Criteria

Criteria ID	Acceptance Criterion	Success Indicator
AC-2.1	Polyclinic list loads correctly from database	All 5 polyclinics displayed (Kardiyoloji, KBB, etc.).
AC-2.2	Clicking a polyclinic navigates to symptom verification page	URL changes to /polyclinics/{id}/check/.
AC-2.3	Symptom list is fetched and displayed for selected clinic	At least 3-10 symptoms shown based on clinic.
AC-2.4	"Evet" button navigates to doctor list	URL changes to /select-doctor/{polyId}.
AC-2.5	"Hayır" button navigates to AI symptom input	URL changes to /ai/analyze

3.3 Traceability

Requirement ID	Design Reference	Implementation
FR3, FR4, FR5	Section 3.3 Use Case 2	PolyclinicListPage.jsx
FR4, FR5, FR6	Section 2.4.3 (Symptom Checker UI)	CheckSymptomsPage.jsx
Database Design	Section 2.2.1 (Clinics & Symptoms)	clinics/models.py

4. Acceptance Test 3: AI-Driven Symptom Analysis

4.1 Use Case Description

UC-03: A patient describes their symptoms in free text, and the AI system recommends the most appropriate polyclinic(s).

4.2 Acceptance Criteria

Criteria ID	Acceptance Criterion	Success Indicator
AC-3.1	Free-text input field accepts symptom description	Textarea allows at least 500 characters.
AC-3.2	AI analysis completes within 5 seconds	Response time < 5s (measured via Network tab).
AC-3.3	AI returns valid JSON with clinic recommendations	Response format: {"clinics": ["KBB"], "reason": "..."}.
AC-3.4	System parses JSON and displays recommended clinics	Clinic names shown in UI.
AC-3.5	User can select a recommended clinic	Clicking clinic navigates to doctor list.
AC-3.6	Error handling for API failures	*"AI analizi başarısız"* message shown on timeout.
AC-3.7	Loading indicator shown during AI processing	Spinner or *"Analiz ediliyor..."* text appears.

4.3 Traceability

Requirement ID	Design Reference	Implementation
FR6, FR7	Section 2.2.3 (AI Prompt Logic)	ai/views.py - AIAnalyzeSymptomsView
PR1	Section 3.2 (Performance Requirements)	OpenAI API call optimization
UC-03	Section 3.3 Use Case 3	SymptomInputPage.jsx

5. Acceptance Test 4: Appointment Booking

5.1 Use Case Description

UC-04: A patient selects a doctor, chooses an available time slot, and successfully books an appointment.

5.2 Acceptance Criteria

Criteria ID	Acceptance Criterion	Success Indicator
AC-4.1	Doctor list is filtered by selected polyclinic	Only doctors from chosen clinic appear.
AC-4.2	Doctor information is displayed correctly	Name, title, and clinic shown.
AC-4.3	Clicking "Saat Seç" navigates to slot selection	URL changes to /select-slot/{doctorId}.
AC-4.4	Available slots are loaded and displayed	Date + time shown for each slot.
AC-4.6	Slot locks immediately upon booking	Database is_booked flag updates to TRUE.

Criteria ID	Acceptance Criterion	Success Indicator
AC-4.7	Appointment record is created	New row in appointments_appointment table.
AC-4.8	OneToOne constraint prevents double booking	Attempting to book same slot twice shows "Bu slot dolu" error.
AC-4.9	Success message appears after booking	*"Randevunuz başarıyla oluşturuldu!"*
AC-4.10	User redirected to dashboard	Auto-redirect after 2 seconds.

5.3 Traceability

Requirement ID	Design Reference	Implementation
FR8, FR9	Section 2.2.4 (Slot Locking Logic)	appointments/views.py
FR8	Section 2.4.5 (Doctor Selection UI)	DoctorListPage.jsx, SlotSelectionPage.jsx
TC-01	Quality Assurance Doc	appointments/serializers.py - validate()

6. Acceptance Test 5: Admin & Doctor Management

6.1 Use Case Description

UC-05: An administrator logs in, adds a new doctor to the system, and configures their working hours.

6.2 Acceptance Criteria

Criteria ID	Acceptance Criterion	Success Indicator
AC-5.1	Admin dashboard is accessible only to admins	Non-admins redirected to login or error page.
AC-5.2	Admin can add a new doctor	"Doktor başarıyla oluşturuldu" message appears.
AC-5.3	System enforces @doc.com email constraint	Invalid email format returns error.
AC-5.4	Admin can delete a doctor	"Doktor silindi" confirmation popup appears.
AC-5.5	Admin can add working hours (slots)	New slots appear in the schedule list.

6.3 Traceability

Requirement ID	Design Reference	Implementation
FR13 (Manage Doctors)	Section 2.4.6 (Admin Dashboard)	doctors/views.py - DoctorCreateView
FR14 (Manage Schedule)	Section 2.2.4 (Slot Logic)	doctors/views.py - ScheduleCreateView
SWC-04 (Security Constraint)	Section 2.2.1 (Database Schema)	accounts/models.py - CHECK Constraint

7. Task Matrix

Task	Responsible Member(s)
Define Acceptance Criteria (AC-1.x)	Helen Parlar
Define Acceptance Criteria (AC-2.x, AC-3.x)	Mete Kılıç
Define Acceptance Criteria (AC-4.x)	Ahmet Çakmak
Write Test Steps (AT-01)	Helen Parlar
Write Test Steps (AT-02, AT-03)	Mete Kılıç
Write Test Steps (AT-04)	Ahmet Çakmak
Traceability Mapping	All Members
Screenshot Collection	Ahmet Çakmak, Mete Kılıç
Final Review & Formatting	Helen Parlar