HTTP 5310 Capstone – Requirements Document

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1. Introduction and Rationale

Project Name: AutoFix Scheduler

Developer: Sarath Saji

Purpose:

AutoFix Scheduler is a WordPress-based platform designed to streamline appointment bookings for automobile workshops. It allows customers to schedule services online and empowers workshop staff to manage workflows efficiently through a secure admin dashboard.

Rationale:

- Eliminate Phone-Based Booking: Reduces dependency on manual scheduling.
- **Enhance Customer Experience:** Automated confirmations, reminders, and service history tracking.
- Operational Efficiency: Organizes workshop schedules and resource allocation.

Goal:

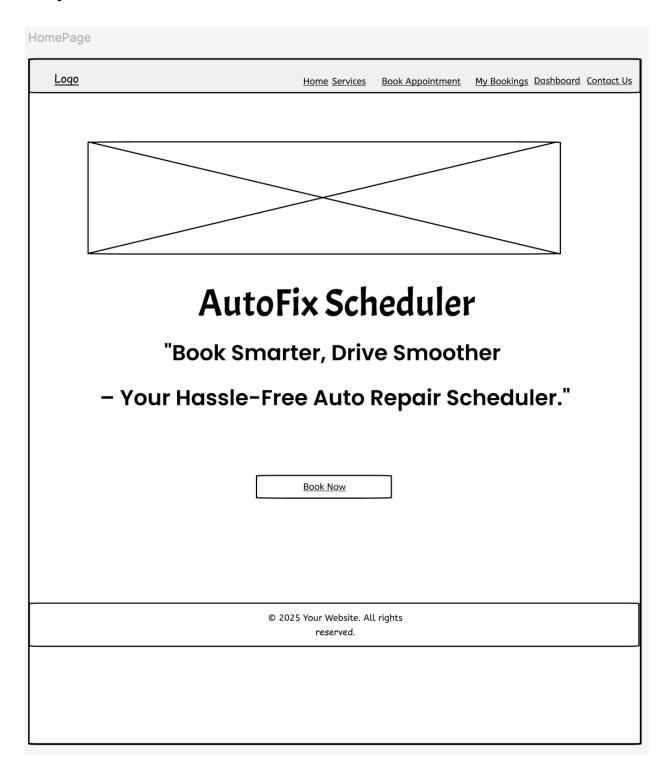
To build a responsive, accessible, and user-friendly booking system that demonstrates proficiency in WordPress customization, plugin integration, and theme development.

2. Content Evaluation

a. Navigation

- Home
- Services
- Book Appointment
- My Bookings (for Customers)
- Dashboard (for WorkshopAdmin)
- Contact Us

b. Layout & Wireframe



ServicesPage Logo Home Services Book Appointment My Bookings Dashboard Contact Us **Services** "Reliable Repairs, Right on Schedule - Explore Our Full Range of Auto Services." Oil Change **Tire Rotation Brake InspInspection** © 2025 Your Website. All rights reserved.

BookAppoinmentPage Logo My Bookings Dashboard Contact Us Home Services Book Appointment **Book Appointment** <u>Name</u> <u>Email</u> <u>Date</u> <u>Service</u> Submit "Skip the Wait - Schedule Your Auto Service in Just a Few Clicks." © 2025 Your Website. All rights reserved.

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Logo		Home Services Book Appointment	My Bookings Dashboard Contact Us
	My E	Bookings	
	Date		
	Service		
	Status		
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DashboardPage Logo Home Services Book Appointment My Bookings Dashboard Contact Us **Dashboard Manage Services Statistics** Manage Bookings Manage Users © 2025 Your Website. All rights reserved.

ContactUsPage			
<u>Logo</u>	Home Services Book Appointment My Bookings Dashboard Contact Us		
	Contact Us		
	<u>Name</u>		
	<u>Email</u>		
	Subject		
	Send Message		
	"Skip the Wait		
– Schedule Your Auto Service in Just a Few Clicks."			
	© 2025 Your Website. All rights reserved.		

c. Content Sources

• **Text:** Custom-written service descriptions and instructions.

Icons: FontAwesomeImages: Unsplash/PexelsMaps: Google Maps API

• Email: WP Mail SMTP (Gmail integration).

3. Functionality (User Stories)

Client (Customer) User Stories

Account Management

- As a Customer, I want to register so I can create an account.
- As a Customer, I want to log in so I can access my account.
- As a Customer, I want to update my profile so I can keep my information up to date.
- As a Customer, I want to update my vehicle details so I can reuse them during bookings.
- As a Customer, I want to recover my password so I can access my account if I forget it.

Appointment Booking

- As a Customer, I want to browse available services so I can choose the right one.
- As a Customer, I want to choose an appointment date so I can schedule my visit.
- As a Customer, I want to choose an appointment time so I can visit at my convenience.
- As a Customer, I want to receive confirmation via email so I know the appointment is scheduled.

Appointment Management

- As a Customer, I want to view upcoming appointments so I can plan ahead.
- As a Customer, I want to view past appointments so I can track service history.
- As a Customer, I want to reschedule appointments so I can adjust my plans.
- As a Customer, I want to cancel appointments so I can free up my time.
- As a Customer, I want to get automated reminders via email so I don't miss appointments.

Workshop Discovery

- As a Customer, I want to see the workshop location on a map so I can find directions.
- As a Customer, I want to see workshop ratings so I can make informed choices.

Feedback and Reviews

- As a Customer, I want to leave a review so I can share my experience.
- As a Customer, I want to view my submitted feedback so I can confirm it was recorded.

Workshop Admin (Workshop Manager) User Stories

Account and Role Management

- As a WorkshopAdmin, I want to log in so I can access the admin dashboard.
- As a WorkshopAdmin, I want to edit the workshop profile so I can update business details.

Appointment Management

- As a WorkshopAdmin, I want to view upcoming appointments.
- As a WorkshopAdmin, I want to update appointment status so I can reflect progress.
- As a WorkshopAdmin, I want to filter appointments by date and name.

Service Management

- As a WorkshopAdmin, I want to add services so I can offer more options.
- As a WorkshopAdmin, I want to edit services so I can keep them current.
- As a WorkshopAdmin, I want to delete services so I can remove outdated ones.
- As a WorkshopAdmin, I want to assign mechanics so I can allocate tasks efficiently.

Notifications and Communication

- As a WorkshopAdmin, I want to receive booking alerts so I stay updated.
- As a WorkshopAdmin, I want to send reminders via email so customers don't miss appointments.

Reports and Analytics

 As a WorkshopAdmin, I want to view simple booking statistics using free dashboard tools or reports.

Should Have Features

- As a Customer, I want to upload vehicle documents using free file upload plugins.
- As a Mechanic, I want to log in so I can view assigned jobs.

Nice to Have Features

• As a Customer, I want to use a map so I can locate the workshop easily.

4. Technical Specifications

a. Technology Stack

- Platform: WordPress CMS
- Languages: PHP, HTML5, CSS3, JavaScript (for UI)
- Plugins:
 - Booking Calendar
 - Contact Form 7
 - o User Role Editor
 - WP Mail SMTP
- APIs: Google Maps API

b. Hosting

- Development: Local by Flywheel
- Production: Free Hosting (InfinityFree)

5. Development Specifications

- Folder Structure:
 - o /wp-content/themes/autofix-child
 - /wp-content/plugins/custom-functions
- File Naming:
 - kebab-case (service-manager.php, book-appointment.css)
- Accessibility:
 - Use proper alt tags, semantic HTML, ARIA roles
- Responsiveness:
 - Mobile-first design with breakpoints for 768px and 1366px
- Version Control:
 - o GitHub Repo: https://github.com/sarathsaji/autofix-scheduler

6. Schedule (Sample Weeks)

Week	Task
1	Finalize requirements doc, plugin research
2	Theme setup & CPTs (Services, Mechanics)
3	Booking form & email integration
4	Admin dashboard setup
5	Testing appointments, role permissions
6	Add Should Have features (uploads, mechanic view)
7	Polish UI, add maps, accessibility testing
8	Final testing, documentation, and deployment

7. Conclusion

This capstone project showcases advanced WordPress development skills, including user authentication, booking systems, admin control, and responsive design. By using a CMS as the foundation, the focus will be on customization, integration, and user experience. AutoFix Scheduler aims to be a fully functional, real-world-ready appointment booking system that highlights both development and project planning skills.