**MailCrafter Development Plan (Core Features in 9 Weeks)**

**Overview** The development plan focuses on delivering MailCrafter's core features within 9 weeks. Milestones are set for Weeks 3, 6, and 8 to ensure progress tracking and feature integration.

**Week 1: Discussion and Kickoff** **Goals:**

* Finalize requirements, scope, and technology stack.
* Set up project repository, CI/CD pipeline, and basic project structure.
* Assign roles and create a development timeline.

**Deliverables:**

* Approved project plan.
* Repository and CI/CD pipeline ready.

**Week 2: Start Development - Multi-Email Integration** **Back-End:**

* Secure email integration via app passwords (SMTP/IMAP).
* APIs for adding and managing email accounts.

**Front-End:**

* UI for adding, editing, and managing email accounts.

**Deliverables:**

* Functional email integration for single accounts.

**Week 3: Milestone 1 – Multi-Email Integration and Initial Template System** **Multi-Email Integration:**

* Finalize testing and validation for multi-account management.

**Customizable Email Templates (Phase 1):**

* Develop template creation and editing with dynamic placeholders (e.g., {name}, {email}).
* Save and reuse templates in the database.

**Deliverables:**

* Fully tested multi-email integration.
* Initial email template system (create, edit, and save templates).

**Week 4: Custom Group Management (Phase 1)**

* Define group properties (e.g., name, location).
* API endpoints and UI for group management.

**Deliverables:**

* Backend and frontend for basic group management.

**Week 5: Excel File Import for Group Management (Phase 1)** **Features:**

* Backend to parse Excel files and map columns to group properties.
* Frontend interface for file upload and column mapping.
* Auto-mapping for common columns and manual mapping options.

**Deliverables:**

* Excel file import with basic column mapping and group creation.

**Week 6: Milestone 2 – Full Custom Group Management and Property-Based Personalization** **Custom Group Management (Phase 2):**

* Integrate Excel import and add data validation.

**Property-Based Personalization:**

* Link group properties with email templates.
* Backend for personalized email generation.
* UI for previewing personalized emails.

**Deliverables:**

* Seamless group management with Excel import and validation.
* Fully functional property-based personalization.

**Week 7: Recurring Email Actions** **Backend:**

* Implement scheduling logic for recurring tasks.
* Store recurring email configurations.

**Frontend:**

* UI for setting up recurring emails.
* Integration with background job processors (e.g., Hangfire, Quartz.NET).

**Deliverables:**

* Tested recurring email scheduling feature.

**Week 8: Milestone 3 – Insights and Conditional Logic in Templates** **Insights and Metrics:**

* Track email performance metrics (open rates, click rates).
* Backend APIs and UI for analytics.

**Conditional Logic in Templates:**

* Enable conditional sections in templates.
* UI for creating conditions in templates.

**Deliverables:**

* Functional analytics dashboard.
* Conditional logic in templates with preview support.

**Week 9: Final Testing and Deployment** **Focus:**

* Comprehensive testing (unit, integration, UI).
* Bug fixes and performance optimization.
* Documentation for deployment and user guides.

**Deliverables:**

* Fully functional MailCrafter core features.
* Project deployed to staging/production.
* User and technical documentation.

**Summary of Milestones:**

* **Milestone 1 (Week 3):** Multi-Email Integration and Initial Template System.
* **Milestone 2 (Week 6):** Full Custom Group Management and Property-Based Personalization.
* **Milestone 3 (Week 8):** Insights and Conditional Logic in Templates.

This plan ensures timely delivery of core features while providing ample time for testing and refinement.