# Veterinary Clinic – Certificate Generator Spec

Defines the admin-facing and system processes for creating, managing, and generating certificates, reports, and letters using an HTML + WYSIWYG template editor with token placeholders.

## 1) Purpose

- Allow clinic staff to easily create and edit certificate templates without coding.  
- Use placeholder tokens to insert dynamic patient, owner, clinic, and visit data.  
- Generate printable PDF certificates directly from patient or visit view.  
- Support multiple categories: Certificates, Reports, Letters.

## 2) Template Management (Admin UI)

- List view:  
 • Template name  
 • Category (Certificate / Report / Letter)  
 • Status (Active / Inactive)  
 • Last updated  
 • Actions: Edit, Duplicate, Delete  
  
- Add/Edit template form:  
 • Template name (text)  
 • Category (dropdown)  
 • Status (Active/Inactive)  
 • WYSIWYG editor (TinyMCE/CKEditor)  
 • Token picker above editor (click to insert token)  
 • Live preview pane (optional)  
 • Save/Cancel buttons

## 3) Token System

Tokens are placeholders in double curly braces replaced at generation time. Examples:  
{{OWNER\_NAME}}, {{OWNER\_MOBILE}}, {{OWNER\_EMAIL}}  
{{PET\_NAME}}, {{SPECIES}}, {{BREED}}, {{AGE}}, {{COLOR}}, {{DISTINGUISHING\_MARK}}  
{{VISIT\_DATE}}, {{VACCINATION\_STATUS}}, {{MICROCHIP\_NUMBER}}  
{{CLINIC\_NAME}}, {{CLINIC\_ADDRESS}}, {{CLINIC\_MOBILE}}, {{CLINIC\_LOGO}}  
{{DOCTOR\_FULL\_NAME}}, {{DOCTOR\_EMAIL}}, {{DOCTOR\_MOBILE}}  
{{CUSTOM}} – free text input at generation time.  
Token picker grouped by category for easy selection.

## 4) Generating a Certificate (User Flow)

1. From patient or visit view, click 'Generate Certificate'.  
2. Choose template from dropdown (filtered by Active + Category=Certificate).  
3. System pre-fills tokens from DB.  
4. If {{CUSTOM}} tokens exist → prompt user for input.  
5. Render preview in modal with 'Edit Before Print' option.  
6. On confirm → render HTML to PDF (dompdf).  
7. PDF options: Print directly, Download, Attach to Visit.  
8. Save generated certificate metadata (template ID, patient ID, visit ID, date, staff user).

## 5) Storage & Versioning

- Templates stored in database with HTML content.  
- Generated PDFs stored in /storage/patients/{UNIQUE\_ID}/certificates/.  
- Filename format: {date}-{templateID}-{uniqueID}.pdf  
- Optional: store rendered HTML snapshot in DB for audit/versioning.

## 6) PDF Styling

- Use clinic letterhead in header/footer (configurable in settings).  
- Print date and page number in footer (toggleable).  
- Margins adjustable in settings.  
- Optional: watermark or signature image.

## 7) Categories

- Certificates: Fitness, Health, Travel, Euthanasia, Microchip, Consent forms.  
- Reports: Lab, Radiology, Vaccination summary.  
- Letters: Referral letters, Owner communications.

## 8) Permissions

- Only admin/doctor roles can create or edit templates.  
- Front-desk can generate but not edit templates.