

PROJECT CHARTER

DentalAgeCalculator.com

Project Charter adalah sebuah dokumen khusus yang berisi informasi untuk merancang website yang akan dibuat. Project Charter ini dibuat agar pembuatan website sesuai rencana awal dan sesuai tujuan.

INFORMASI UMUM PROYEK		*
Judul Website	DentalAgeCalculator.com	
Nama	Annisa Rahmaputri	*
Email	-	*

1. TUJUAN PROYEK *

- Membantu praktisi forensik, dokter gigi, dan mahasiswa dalam menghitung estimasi usia dental pada anak dengan metode Demirjian, Chaillet, Willems I, dan Willems II
- Peningkatan Efisiensi & Kecepatan: Mengotomatisasi perhitungan manual estimasi usia dental yang kompleks, sehingga dapat mempersingkat waktu, dan mempercepat proses perhitungan
- Mengurangi Human Error: Meminimalisir kesalahan yang sering terjadi dalam penghitungan atau pembacaan tabel manual, sehingga diharapkan dapat menghasilkan estimasi usia dental yang lebih akurat.
- Media Pembelajaran Interaktif: Berfungsi sebagai alat yang efektif untuk mahasiswa kedokteran gigi, membantu mereka memahami dan mempraktikkan berbagai metode estimasi usia dental
- Aksesibilitas: Sebagai kalkulator digital berbasis web, membuatnya mudah diakses di perangkat digital apapun (komputer/laptop/tablet/smartphone) selamat terhubung dengan internet tanpa perlu mengunduh aplikasi apapun
- Mendukung Penelitian Ilmiah: Menyediakan alat yang mudah diakses untuk peneliti yang ingin mempelajari populasi anak tertentu atau membandingkan variasi usia dental di berbagai kelompok.
- Penyebaran Ilmu Pengetahuan (Knowledge Dissemination): Membuat metode estimasi usia dental yang kompleks menjadi lebih mudah diakses oleh praktisi di daerah atau negara yang mungkin tidak memiliki sumber daya atau pelatihan mendalam.
- Penyimpanan dan Riwayat Data Aman: Dengan fitur login, pengguna dapat menyimpan dan melacak riwayat pasien dengan aman

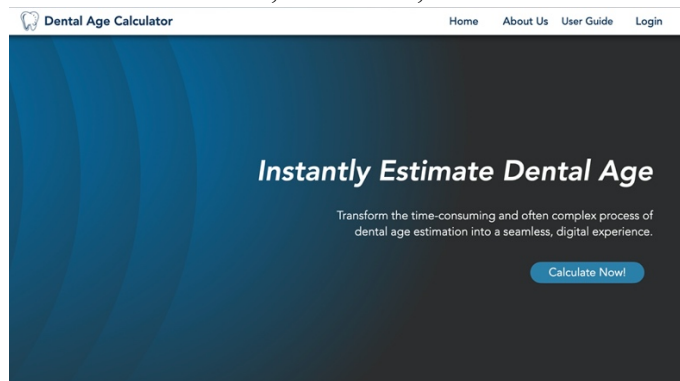
2. FITUR YANG DIBUAT *

Kami ingin membuat web-based digital kalkulator untuk untuk estimasi usia dental pada anak. Detail dan penjelasan fitur-fitur adalah sebagai berikut:

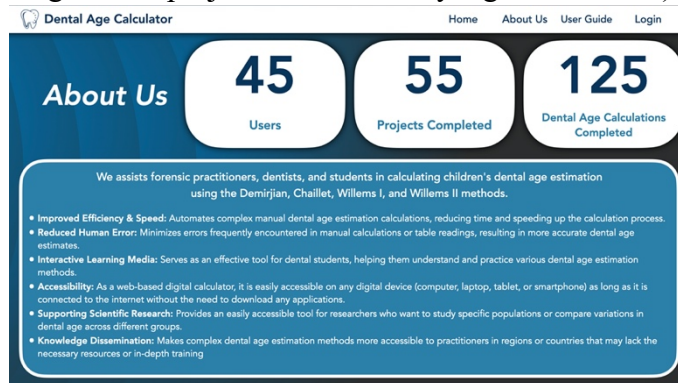
Akses Sebagai User Biasa (Tanpa Login)

Buat Landing Page

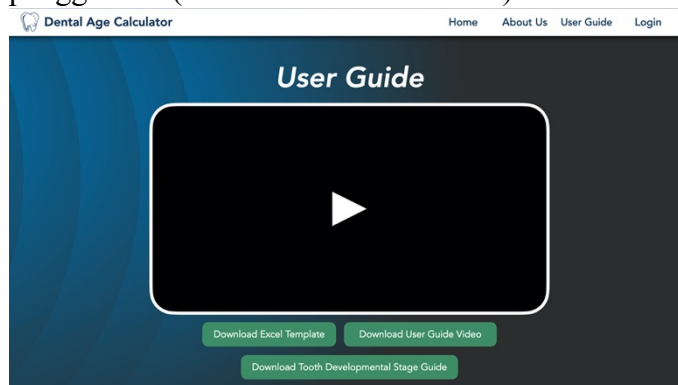
- **Home:** Judul Utama, Sub-Judul, Call to Action Button (Calculate Now)



- **About Us:** Informasi visi misi, Angka data pengguna (Angka total pengguna, Angka total project estimasi usia yang telah selesai)



- **User Guide:** Penjelasan tentang fitur-fitur yang tersedia, Langkah-langkah penggunaan (disediakan melalui video)

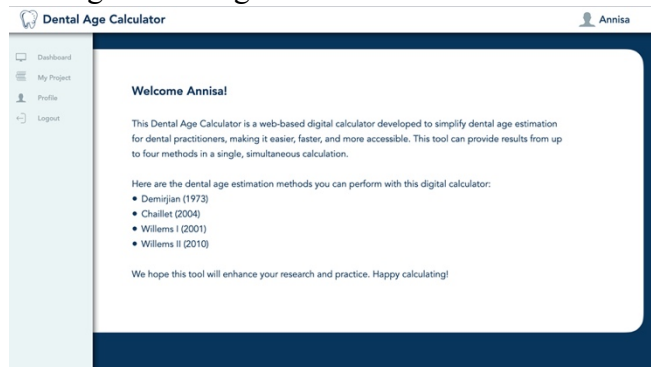


- **Login:** Jika belum punya akun, melakukan Register dahulu, Mengisi data First Name, Last Name, Email, Password, Confirm Password, Job Title (Odontogy Forensic Practitioner, Forensic Medicine Practitioner, Dentist, Lecturer, Student), Country, Institution, dan tekan "Register". Jika sudah punya akun tekan "Already have an account?" dan akan diarahkan ke menu Login.

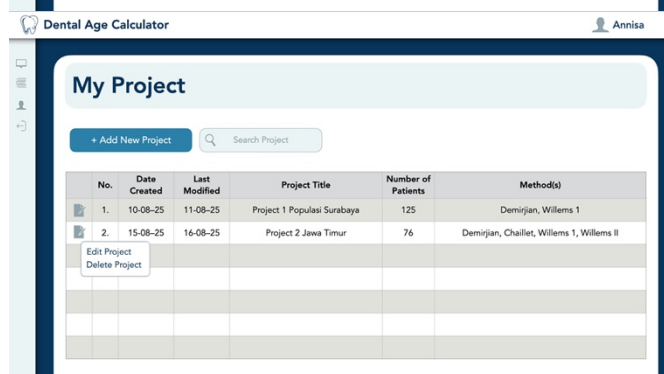
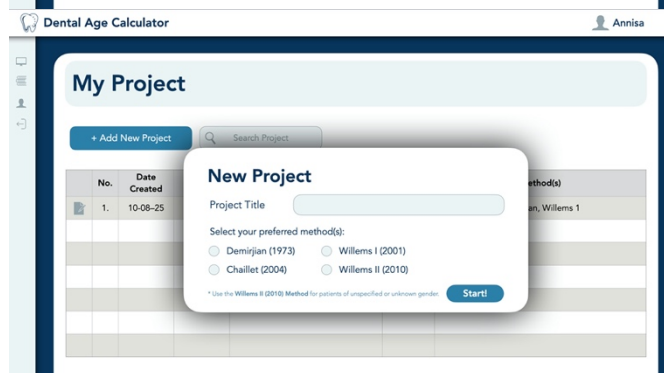
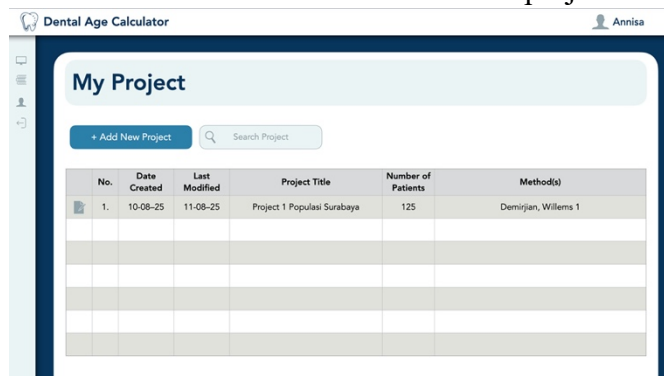
- **Contact Us:** Informasi kontak, nomor telepon, email.

Akses Login User

- **Dashboard** : Menampilkan "Welcome, (nama user)!" dan penjelasan singkat tentang "DentalAgeCalculator"



- **MyProject**: Menu ini menampilkan data project yang telah diselesaikan pengguna. Data yang disediakan dalam tabel Project List adalah (Edit/Delete Project, No., Date Created, Last Modified, Number of Patients, Method(s)). Untuk menambah project baru tekan tombol "+Add New Project", kemudian mengisi "Project Title", metode perhitungan yang dipilih "Demirjian/Chaillet/Willems I/Willems II", kemudian tekan "Start". Untuk mencari project tekan "Search Project"



- a. Setelah menekan "Start", masuk ke laman Project sesuai Judul Project.
- Data yang disediakan dalam tabel Patient List adalah (Edit/Delete Patient, No., Date Added, Patient ID, Gender, Race/Ethnicity, Chronological Age (CA), Tooth Developmental Stages (31, 32, 33, 34, 35, 36, 37), dan Result (Years Old) (D/ C/ W1/ W2)).
 - Untuk mencari pasien tekan "Search Patient".
 - Untuk menyimpan project tekan "Save Project".
 - Untuk mendownload project dengan format PDF tekan "Export to PDF".
 - Untuk mendownload project dengan format Excel tekan "Export to Excel".
 - Untuk kembali ke My Project tekan "Back to My Project".
 - Untuk menambah kalkulasi untuk pasien baru tekan "+Add New Patient".
 - Untuk perhitungan instant, download template Excel dengan tekan "Download Excel Template".
 - Tekan "Import Existed Project" untuk perhitungan instant, dengan project yang sudah diselesaikan oleh user sesuai template yang disediakan, hasil kalkulasi akan terotomisasi dan terintegrasi langsung dan ditampilkan di tabel Patient List.

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Project 2 Jawa Timur

Description: CA: Chronological Age; B: Boy; G: Girl; U: Unknown; D: Demirjian Method (1973); C: Chaillet Method (2004); W1: Williams I Method (2001); W2: Williams II Method (2010)

Back to My Project Search Patient + Add New Patient Save Project Import Excel Download Template Export to PDF Export to Excel

No.	Date Added	Patient ID	Gender	Race/Ethnicity	CA	Tooth Developmental Stages						Result (Years Old)				
						31	32	33	34	35	36	37	D	C	W1	W2
1.	15-08-25	1A01	G	Surabaya	10,6	H	H	G	F	F	G	F	10,6	9,75	10,28	10,56

Edit Patient Delete Patient

- b. Setelah menekan "+Add New Patient", masuk ke laman Add Patient.
- Menampilkan panduan untuk mengklasifikasikan tahapan perkembangan gigi "Tooth Developmental Stage Guide".
 - User kemudian mengisi Date of Data Collection* (DD-MM-YYYY), Patient ID*, Gender (Boy/Girl/Unknown), Race/Ethnicity, Chronological Age (CA), Central Incisor (31)* (A/B/C/D/E/F/G/H), Lateral Incisor (32)* (A/B/C/D/E/F/G/H), Canine (33)* (A/B/C/D/E/F/G/H), First Premolar (34)* (A/B/C/D/E/F/G/H), Second Premolar (35)* (A/B/C/D/E/F/G/H), First Molar (36)* (A/B/C/D/E/F/G/H), Second Molar (37)* (A/B/C/D/E/F/G/H).
 - Tekan "Upload Patient's Panoramic Radiograph" untuk mengupload foto radiografi panoramik pasien
 - Setelah selesai tekan "Submit", kemudian kalkulasi dilakukan oleh sistem dan di tampilkan pada Tabel Patient List.

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Add Patient

Prepare patient's panoramic radiograph and pay attention to the 7 left mandibular teeth! Select the developmental stages of each tooth following the Tooth Developmental Stage Guide!

Date of Data Collection*

Patient ID*

Gender

Race/Ethnicity

Chronological Age (CA)

Central Incisor (31)*

Lateral Incisor (32)*

Canine (33)*

First Premolar (34)*

Second Premolar (35)*

First Molar (36)*

Second Molar (37)*

Unknown gender will only reveal Williams II result.

Submit

Tooth Developmental Stage Guide

Stage	Molars	Premolars	Canine	Incisors	Description
0					No sign of calcification.
A					A beginning of calcification is seen at the superior level of the enamel, forming an inverted conical form. No fusion of these calcified points.
B					Fusion of the calcified points forms one or several cusps which unite to give a regularly outlined occlusal surface.
C					A. Enamel formation is complete at the occlusal surface, its extension and convergence towards the cervical region is seen. B. The beginning of a dental diastema is seen. C. The outline of the pulp chamber has a curved shape at the occlusal border. D. Crown formation is completed down to the cemento-enamel junction.
D					A. The superior border of the pulp chamber in the mandibular teeth has a definite curved form (concave towards cervical). The pulp horns, given an outline shaped like an umbrella tip, in maxilla the pulp chamber has a triangular form. B. Beginning of root formation is seen in the form of a spicule. Uniradicular teeth: a. The pulp chamber walls are now forming a straight line, its continuity is broken by the presence of the pulp horn (larger than in the previous stage). b. The root length > the crown height. Maxilla: a. Initial formation of the radicular bifurcation is seen in the form of calcified points on the apex. b. The root length > the crown height. Mandibular teeth: a. The pulp chamber walls are now forming like an isosceles triangle. The apex ends in a bifurcated shape. b. The root length > the crown height.
E					A. The calcified region of the bifurcation has developed further down from its own lower edge to give the root a more definite & defined outline with lateral spread endings. b. The root length > the crown height. Maxilla: a. The pulp chamber walls are now forming like an isosceles triangle. The apex ends in a bifurcated shape. b. The root length > the crown height.
F					A. The calcified region of the bifurcation has developed further down from its own lower edge to give the root a more definite & defined outline with lateral spread endings. b. The root length > the crown height.
G					The walls of the root canal are now parallel & its apical end is still partially open.
H					a. The apical end of the root canal is completely closed (filled root in maxilla). b. The periodontal membrane has a uniform width around the root & the apex.

Atau

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Add Patient

Prepare patient's panoramic radiograph and pay attention to the 7 left mandibular teeth! Select the developmental stages of each tooth following the Tooth Developmental Stage Guide!

Patient ID

Gender

Race/Ethnicity

Chronological Age (CA)

Date of Data Collection

Central Incisors (31)

Lateral Incisors (32)

Canine (33)

First Premolar (34)

Second Premolar (35)

First Molar (36)

Second Molar (37)

Unknown gender will only reveal Williams II result.

Submit

Upload Patient's Panoramic Radiograph

Tooth Developmental Stage Guide

Stage	Molars	Premolars	Canine	Incisors	Description
0					No sign of calcification.
A					A beginning of calcification is seen at the superior level of the enamel, forming an inverted conical form. No fusion of these calcified points.
B					Fusion of the calcified points forms one or several cusps which unite to give a regularly outlined occlusal surface.
C					A. Enamel formation is complete at the occlusal surface, its extension and convergence towards the cervical region is seen. B. The beginning of a dental diastema is seen. C. The outline of the pulp chamber has a curved shape at the occlusal border. D. Crown formation is completed down to the cemento-enamel junction.
D					A. The superior border of the pulp chamber in the mandibular teeth has a definite curved form (concave towards cervical). The pulp horns, given an outline shaped like an umbrella tip, in maxilla the pulp chamber has a triangular form. B. Beginning of root formation is seen in the form of a spicule. Uniradicular teeth: a. The pulp chamber walls are now forming a straight line, its continuity is broken by the presence of the pulp horn (larger than in the previous stage). b. The root length > the crown height. Maxilla: a. Initial formation of the radicular bifurcation is seen in the form of calcified points on the apex. b. The root length > the crown height. Mandibular teeth: a. The pulp chamber walls are now forming like an isosceles triangle. The apex ends in a bifurcated shape. b. The root length > the crown height.
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F					A. The calcified region of the bifurcation has developed further down from its own lower edge to give the root a more definite & defined outline with lateral spread endings. b. The root length > the crown height.
G					The walls of the root canal are now parallel & its apical end is still partially open.
H					a. The apical end of the root canal is completely closed (filled root in maxilla). b. The periodontal membrane has a uniform width around the root & the apex.

- **Profile:** Menampilkan profile pengguna dimana pengguna dapat mengedit profile, update password, maupun men-delete account.

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Profile

Update profile information and email address

Profile Picture

Choose Profile Picture

Name

Email

Job Title

Country

Save

Update Password

Current Password

New Password

Confirm Password

Save

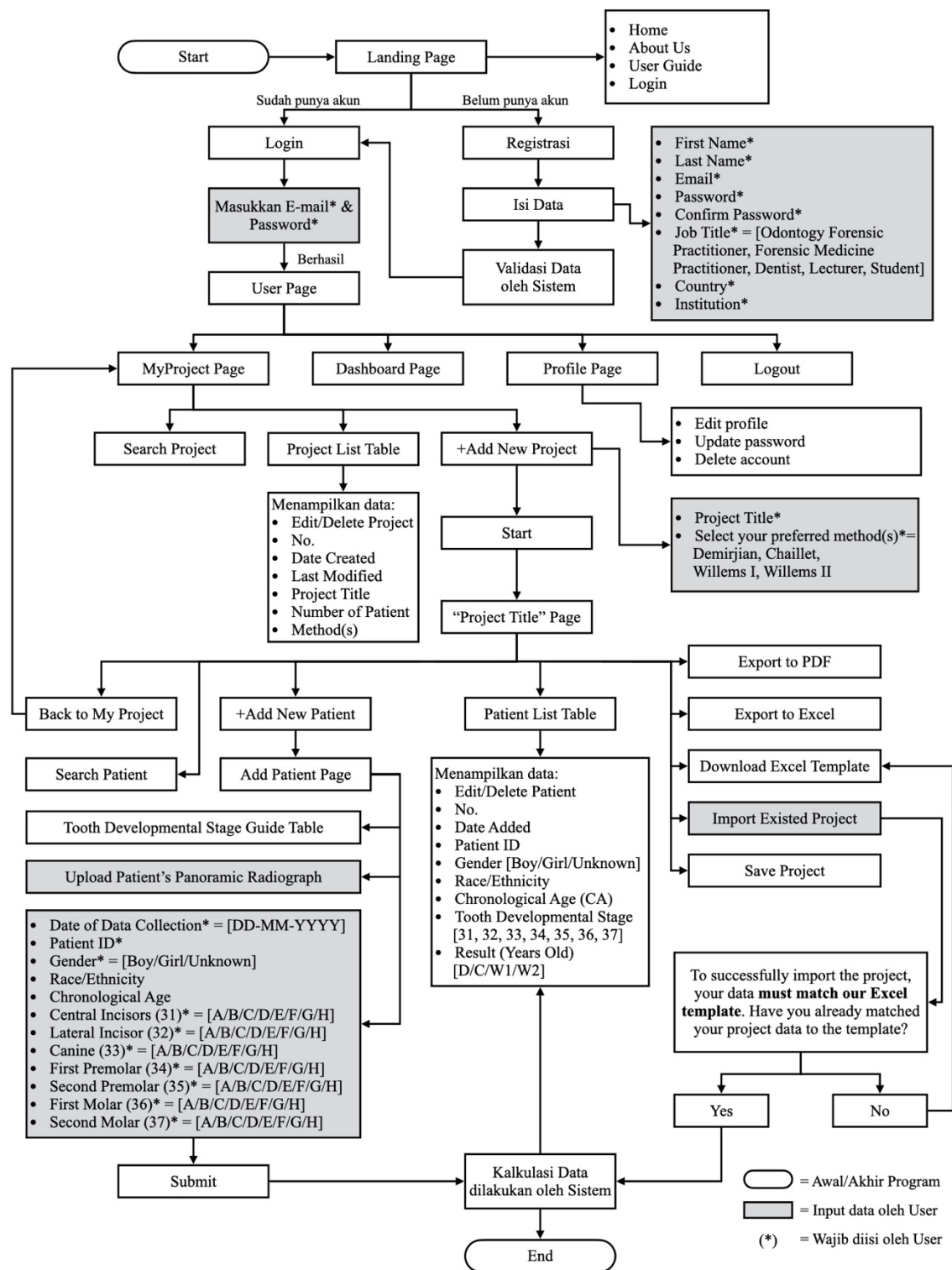
Delete Account

Once your account is deleted, all of its resources and data will be permanently deleted. Before deleting your account, please download any data or information that you wish to retain.

Delete

- **Logout**

Flowchart User



Akses login admin (Menyusul)

- Dashboard : Menampilkan "Welcome, Admin (nama admin)!" dan penjelasan singkat bahwa saat ini sedang ada di laman admin
- User's Info: Menampilkan jumlah dan data users (jumlah users, asal negara, pekerjaan, email, project yang dikerjakan setiap users)

- Manage User: Menampilkan data user, admin bisa mengelolah data user (update data user, hapus data user)