Design & Development Proposal:

PRUDENTIAL BENEFICIAL GENERAL INSURANCE

Car Premiums Calculator App

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1. Introduction & brief overview

We design & develop apps to solve problems, improve systems, and automate tasks.
To truly achieve its purpose, the app should also have a great user experience, be accessible, and modular.
The goal will be to provide Beneficial Life with a premium calculator app tailored specifically to your needs and requirements.

2. Context and Objectives

PRUDENTIAL BENEFICIAL GENERAL INSURANCE is looking to build a calculator that will facilitate that calculation of insurance premiums, specifically, car premiums

The goals:

- Develop an application that makes calculation of car insurance premiums easier for both sales agents and public..
- Educate the PRUDENTIAL BENEFICIAL GENERAL INSURANCE team on using the app and provide software management training to optimize workflow and maintenance down the line.

To achieve those objectives, the we will:

- Meet and interview key team members to gain (more) insights on goals and functionality requirements.

- Determine & establish the best technology stack for these specific requirements.
- Fully design and develop the 'back-end' and 'front-end' of the app;
- Train the team to use the app and update content where needed with minimal developer support;

The final deliverable for this project will be a fully functional cross platform *Car Insurance Premiums Calculator* app

3 - Timeline, Milestones & Cost Structure

3.1 - Progressive Web App (6 weeks)

3.1.1 Timeline & Milestones for PWA

Phase 1 (1 week): Initial meeting & Staff Interviews:

Initial discovery meeting. We will prepare a questionnaire for your team to fill out. This will help us with project scope and contribute to user research

Phase 2 (4 weeks): 4-Week Check-In & Initial Reveal

Unveil of first working version & seeing how the essential aspects of the UI/Ux align with the software functionality and making adjustments where necessary.

Phase 3 (1 week): Final Reveal, Training, & project handover.

Meeting with the Project Manager, or preferred staff members and setting up training sessions on app usage and maintenance

3.1.2 - Price Summary for PWA

Here is a full list of the services included within the scope of the project.

ITEMS	**TOTAL**
UI/UX Design entailing ● User Research ● Market Research (Competitive UX Analysis) ● Design-Centric Deliverables (Prototypes, mockups & UI design) ● Testing Deliverables	500.000 XAF
Front-end and back-end development with ● Vue js ● Laravel ● Nginx	800.000XAF
	TOTAL: **1.300.000 XAF**

3.2 - Native App (19 weeks)

3.2.1 Timeline & Milestones for Native App

Phase 1 (1 week): Initial meeting & Staff Interviews:

Initial discovery meeting. We will prepare a questionnaire for your team to fill out. This will help us with project scope and contribute to user research

Phase 2 (3 weeks): 3-Week Check-In & UI/UX Reveal

Unveil of first clickable prototype & seeing how the essential aspects of the UI/Ux align with the software requirements and making adjustments UI/UX where necessary.

Phase 3 (6 weeks): Android App development & Android Functionality check-in

Unveil of first working prototype of android app, with the possibility to make adjustments where necessary.

Phase 4 (7 weeks): iOS App development & iOS Functionality check-in

Unveil of first working prototype of iOS app, with the possibility to make adjustments where necessary.

Phase 5 (1 week): Final Reveal, Training, & project handover.

Meeting with the Project Manager, or preferred staff members and setting up training sessions on app usage and maintenance

3.2.2 - Price Summary for Native App

Here is a full list of the services included within the scope of the project.

ITEMS	**TOTAL**
UI/UX Design entailing ● User Research ● Market Research (Competitive UX Analysis) ● Design-Centric Deliverables (Prototypes, mockups & UI design) ● Testing Deliverables	500.000 XAF
Android App Development	870.000 XAF
iOS App Development	950.000 XAF
	TOTAL: **2.320.000 XAF**

4. Additional Services

We will provide support for 6 (six) weeks after the app's initial development.

In addition to the services listed in the "Price Summary," you may require additional services, including:

- Post-Launch Brainstorm sessions
- Hardware and corresponding software configuration
- Additional training sessions

We can also produce additional documents throughout the project, including:

- Developer guidelines
- Training manuals
- Usecase scenarios

We will quote the services above on an on-demand basis.

5. About Progressive Web Apps & Native Apps

What is a PWA?

In a nutshell, progressive web applications (PWA) are an emerging technology from Google. Simply put, Google PWA apps have taken the best of both the native mobile and web technologies.

Progressive web apps work as websites but provide an almost full native mobile app experience. Users can get push notifications, work offline, and view screen-responsive pages. So it doesn't matter whether users have a poor Internet connection or don't have it at all.

The advantages of progressive web apps for both business owners and users are:

Improving conversion: Fast-loading pages prevent users from giving up the application. Also, they help customers quickly find what they want.

Increasing engagement: Push notifications instantly alert users on new content.

Working reliably: Due to pre-caching, progressive web apps *work even without an Internet connection.*

What is a native app?

In simple terms, a native app is an application that is built for a particular mobile device (smartphones or tablets). Users install them directly on their mobile devices.

Native apps can be found on specific online stores or marketplaces such as Google Play or App Store

PWA vs Native apps: a comparison.

1. App creation and launch to the market

Native App

The development of one native mobile app for Android and iOS requires 2 teams, 1 per each system. Even if the apps for both systems are

developed at the same time, it will still take longer to make sure the functionality is the same for both apps. All this means considerable time and costs required to create an app.

Progressive web apps

The process of the app creation and launch goes faster for two reasons:

A PWA is still a website, though accelerated. You only need one team of web developers to build a progressive web app, to create it. They will deal with service workers, Lighthouse, etc. As a result, the product will be launched much faster.

Validation via stores is not required, as it is hosted on a link. You don't have to submit your app to any store nor wait for it to be approved. Once the PWA is built and published on the Web - it is ready to use.

Checking a progressive web app vs native for app creation and launch to the market time, the advantages of progressive web apps are clear. These solutions are more cost- and time-effective. A native mobile app will cost more to build and maintain, plus will also take a bit longer to launch due to submission to Apple and Google stores

2. App distribution

Native App

Native apps are housed on app stores, which translates to a longer user journey. They'll have to have downloaded the app store (Google play or

Appstore) on their devices to be able to search and download the app. This long user journey gives possibilities to a possible drop off along the way.

Progressive web app (PWA)

When it comes to PWA software, the process of distribution is different. Since it’s a website, a user doesn’t even have to know that you have a PWA. They will be looking up a product or service on Google and find your progressive website, which will suggest the user to add it on the home screen.

Speaking about Google, after mobile-first indexation was implemented in 2018, the Internet giant has been given preference to fast-loading and mobile-friendly websites. That’s when PWA technology becomes an absolute plus.

Every business wants to be noticed by potential clients. In our market we're talking about users searching via Google, hence the benefits of progressive web apps are evident

3. Installation

Native App

To install your mobile app, an average user will have to:

Find your application among all those millions of apps;

Download and install it (waiting patiently if the connection is slow or the app is big).
And only now they will be able to open and use it.

All this means that you could lose your customer at any stage.

PWA

The following are the simple steps a user will take to install a PWA:

Find your PWA-site via Google and open it;
Allow “Add to the home screen” when the pop-up prompt appears. In some cases both Android and iOS users will have to use the “Add to home screen” option in a browser menu.

The app is on the home screen, ready to use. The main difference between a progressive web app vs native is that now PWAs can be installed on desktop as well. This way, companies can increase their customer base by covering both mobile and desktop users.

A PWA is quickly and easily installed, meaning smaller chances of losing your customer. As a result, your customer retention rate can be significantly improved.

Installing a native mobile app might take a little bit longer than a PWA. So, with this difference, a progressive web app can help you acquire more new users

4. Offline operation

Native app

When we are talking about the native app offline mode, we assume that it operates the same way it does with the connection.

The point is that a native app shows the content and the functionality it managed to cache when the connection was still there. This is available due to local storage and smooth data synchronization with the cloud.

Progressive web apps

In progressive web applications, users can enjoy offline mode as well. When launched, pages show the precached or uploaded content, which is provided with service workers.

Offline mode is implemented differently in PWAs compared to native apps.

Thus, PWAs give the same reliable experience for users as native mobiles. When users want to open a page that has not been pre-cached, they will see a custom “No connection” message, just like in a native app.

Here, when it comes to offline mode, the capacity of PWA and native mobile technologies are nearly equal. Though running differently, both of them give almost similar offline mode experience

5. App updates and maintenance

Native app

Maintenance and updating of a native mobile app can take a lot of resources, both time and money.

Expenses may vary according to services that your development team adds and supplies. In general, it is said that you need to budget 20% of initial mobile development costs when calculating the cost of the native app maintenance.

As for updating, with new OS versions, rolled out about once a year, constant tracking of new requirements may become a routine for your development team.

Progressive web apps

Progressive web apps won’t take so much effort for maintenance and updating. As it is still the Web, your customers won’t need to update anything on their smartphones. Progressive web applications will behave dynamically on any device.

The same refers to maintenance: supporting a website, though progressive, costs much less than supporting a native app.

On the background of supporting and updating native app costs, a PWA solution is quite cost-effective. Updates and maintenance can be made in real time as the user is using the app; without the need for any type of download.

Summary

Easy updates

PWA software is updated automatically. Users are not bothered with permission requests or distracting notifications. Still, they use the latest version of a progressive web app every time they access it.

Cost-effectiveness

Cost-effectiveness is one of the key benefits of progressive web apps. The technology helps companies cut expenses significantly. With the PWA approach, companies no longer need to build, maintain, and update separate versions for iOS and Android. As a result, the total cost of a completed PWA solution is significantly lower compared to a native app.

Independence from app stores

As soon as a native application is completed, it should be added in major app stores. Google Play, App Store, and Microsoft Store set high requirements for apps they include in their databases. It may take too much time and money to satisfy them.

Besides, App Store and Google Play take a 30% commission from the price of paid applications and in-app purchases.

In this regard, PWAs that are not necessarily added to app stores are winners. They free developers of complicated reconciliation procedures.