



Daba 'GO

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« Daba'Go's purpose is to improve the mobility experience in developing cities by offering more visibility to stakeholders »

Vision: Daba'Go aspire to become an essential transport platform in Africa and then extend our services to the rest of the world. Our goal is to make transport information clear and precise to all Africans without constraints and stress daily, as well as to participate in the optimization and development of the continent's public transport networks by collaborating with local transport providers.

Principle

Daba'Go does not aspire to address all transport problems in large developing cities because some go beyond the understanding of a simple entrepreneurial desire. Daba'Go works on two principles :

- **A solution for the human:** a solution available 24/7, accessible and adaptable to everyone regardless of social origin or income level, intuitive and easy to use, exhaustive on multimodal coverage and responds to problems that directly affect them (saturation, budget, health, etc.).
- **A solution for transport providers:** a tailor-made solution for the city which takes into account its specificities and the multiplicity of its types of transport (tram, bus, train, car-sharing taxi, hybrid car, etc.), the rapid evolution of the city and therefore evolves with it. Finally, we want our solution to be consistent with the country's policies and the concepts of sustainable development.

Application

Daba'Go offers an application that **calculates the optimal route** for a given path and offers the user a selection of options considering the different means of transport available (train, taxi, tram, walk, bus...). Routes are calculated and classified according to the user's preference criteria:

- ▶ Cost
- ▶ Duration
- ▶ Maximum number of connections
- ▶ Refusal to use certain means of transport

In addition, through partnerships, Daba'Go aims to be **exhaustive** on all the possibilities of getting around within a city.



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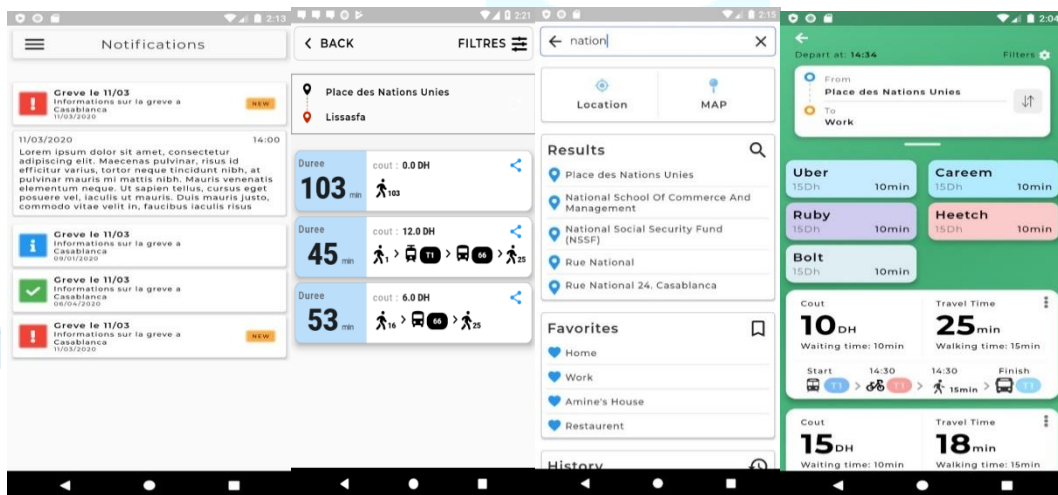
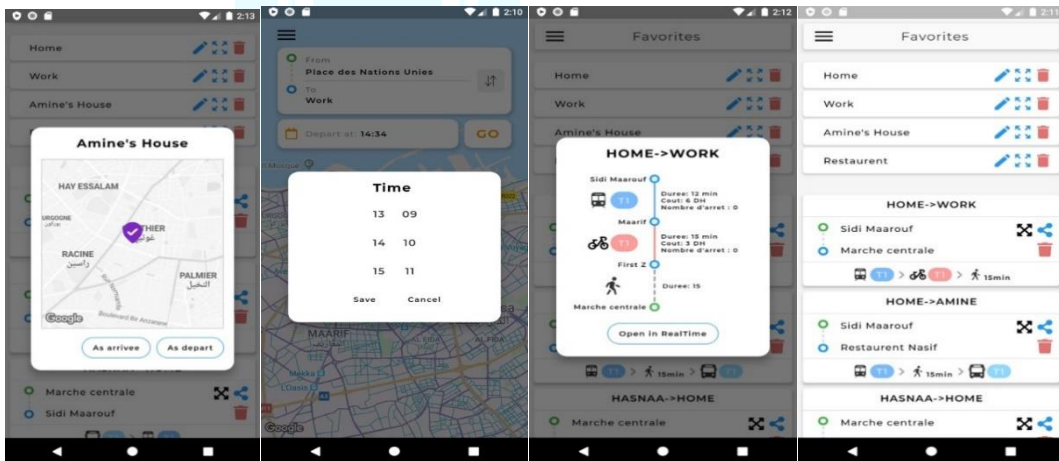
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The Daba GO application is available on any smartphone (Android and Iphone) regardless of its version and on the website. Continuous monitoring is provided to manage bugs and improve the application.

This application is therefore intended to be a suitable solution for developing cities since it:

- ▶ It is carried out by potential users and based on requests from local transport users.
- ▶ It considers the specifics of the organization of transport that are found almost only in large cities of developing countries.

Link of a YouTube video on the current status of the application : <https://www.youtube.com/watch?v=HUGmHqFnuxc>



Innovation

The innovative aspect of Daba'Go, according to the OECD OSLO manual, is that it is a product innovation. Indeed, the application is a new good for the city and offers a new and improved service in terms of its characteristics and intended uses. The solution responds to



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the real issues and needs expressed above in the context reminder. Similarly, if we refer to the classification table of innovations by Rebecca Henderson and Kim Clark, Daba'Go meets the criteria of **modular innovation**, since it does not profoundly change the habits of transportation users, but makes significant changes to the tools they are already familiar with (Google Maps) to provide another more suitable one (Lopez, 2014).

In addition, Daba'Go proposes a brand **new algorithmic model** for route calculation that is able to combine traditional transport (streetcar, bus, train...) and transport specific to large African cities (large cab, small bus, boda...) using Artificial Intelligence/Machine Learning...

We return "**from scratch**" to the route calculation systems to consider transport that does not have a fixed theoretical departure and arrival time (large cab, small bus, boda...).

This is done in three steps :

1.Collection of data	2. A deep learning approach	3. Incremental Learning
Go to the field to recover the data corresponding to the transport in question	It fits perfectly with the problem of predicting the waiting time of irregular transports which, at first glance, do not follow an apparent order but rather a hidden order that Deep Learning's algorithms are able to find.	This method in the name of Incremental Learning is integrated into the application and allows the collection of data in real time, which in turn enriches and improves the algorithm.

In total, we have at least three technical elements that can be valued independently (data integration tool, database of large taxis and route calculation algorithm).

Impact

Current State	Impact of Daba'Go
<p>Saturation :</p> <ul style="list-style-type: none"> - 16 black points in Casablanca - Number of trips doubled by 2030 in Casablanca - Saturation → delay → deteriorated travel experience → deteriorated image → impact on the economy 	<p>Increase in the level of use of public transport and travel experience :</p> <ul style="list-style-type: none"> - 68% of private vehicle users answer "yes" to the question "Would you be ready, if the public transport system was efficient, to reserve the use of your car for destinations not served by them?" - Possibility of actors to have secure and regular data on users - Upgrading of cities in terms of transport information system - Development of transport system infrastructures (already very advanced)
<p>Lack of visibility :</p> <ul style="list-style-type: none"> - 52% of users do not know the nearest station - 100% of transport providers have a problem with information about their 	



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<p>customers</p> <ul style="list-style-type: none"> - 55% of users spontaneously ask for a better information system 	
<p>Cost :</p> <ul style="list-style-type: none"> - The government invested more than 1.3 billion dirhams in transport in 2018 (investment not optimized due to lack of visibility) - The lack of visibility pushes the user to use more expensive transport (small taxi or personal car) - A personal car costs 6 times more expensive per year than public transport, i.e. 40,000 dh (knowing that the minimum wage is 32,376 dh / year) with an increasing gap (vehicle parts and gasoline more and more expensive) 	<p>Economy for the city and the user</p> <ul style="list-style-type: none"> - Investment based on figures and reliable in terms of transport - Transition from private car to public transport - Monitoring of users of their transport budgets - Ability for users to compare different routes in terms of cost - Solution offering service providers to validate the impact of their investments
<p>Environment, Health and Security</p> <ul style="list-style-type: none"> - 15% of greenhouse gas emissions from transport - Casablanca 3 times more polluted than cities with 3 times less vehicle - The air pollution has cost 9.7 billion DH in Morocco in 2014 - More than 50% of respiratory consultations for children under 5 are due to air pollution - Pollution contributes to 9% of gross mortality - The car is 34 times more deadly and 3 times more injured - 3 499 road deaths in Morocco is much that countries with a fleet 7 times less 	<p>Ecological, Health and Safety Impact</p> <ul style="list-style-type: none"> - Division of greenhouse gas emissions by 6 or even 7 minimums (possible to go to 0 with electric public transport) - Passage of the contribution of pollution to gross mortality from 9 to 1.5% - Valuation of public transport which is up to 34 times safer - Monitoring of users of their CO₂ emissions - Possibility for users to compare different routes in terms of CO₂ emissions

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