

and human resource to maintain the server. However, after the application is on the market for a period of time, the demand for the application may grow and overwhelm the capacity of the static server, potentially causing jamming or crashing of the server. As such, the traditional static server architecture inevitably mismatches supply and demand, providing either too much or not enough computational resources.

SUMMARY

[0004] The embodiments herein disclose demand generation platforms implemented with serverless computing architecture and application management methods. The demand generation platform analyzes the intent of a user to find a particular service and presents options to the user for such service. The serverless architecture responds to demand dynamically. The serverless architecture is automatically scalable to match the change of demand, providing no mismatch between demand and supply of computational resources.

[0005] This disclosure uses a salon finding application that uses a demand generation platform, as an example of an application management. It is noted that the computational architecture disclosed is not limited to a salon finding application. Other software applications such as finding a car, a house, a restaurant, a nail shop, a movie, a hotel, a service, or the like can all be similarly managed by the demand generation platform.

[0006] In a first aspect, the present disclosure provides a demand generation platform comprising a salon application having an intent analyzer, on a first computing device, associated with a social media, wherein an intent for a salon service is expressed by a user on the social media and not in the salon application; the intent analyzer deciphering the intent of the user and creating a request for a service based on the intent, a salon service application program interface (API) finding a salon based on the request, and a gateway API, located on a serverless backend system, wherein the gateway API controls data throttling for processing the request and creates a cache having a defined size, data structure and forward and backward linking for the request; and a database interface responding to the request, the database interface communicating with a dynamic database that provisions resources only when requested; wherein the demand generation platform can generate demand for the salon service without the user requesting the salon service by analyzing the intent of the user on the social media.

[0007] In a second aspect, the present disclosure provides a method of using a demand generation platform, the method including instructions, when executed by a processor, cause the processor to execute actions comprising: receiving, by a first processor, an indication of an intent in finding a service provided by a salon, wherein the first processor is a processor of a device, the device includes machine readable memory accessible by the first processor; analyzing, by the first processor, the indication

of the intent; finding a salon, by the first processor, at least in part, based on the intent analyzed; receiving, by the first processor, a request from a user to make a reservation for the salon; communicating with a gateway API, located on a serverless backend system, wherein the gateway API controls data throttling for processing the request and creates a cache having a defined size, data structure and forward and backward linking for handling the request; communicating, by the gateway API, with a dynamic database that provisions resources only when requested; and responding to a request for making an appointment with the salon.

[0008] In a third aspect, a method of using a demand generation platform. The method including instructions, when executed by a processor, cause the processor to execute actions comprising: receiving, by a gateway API of a serverless system, a request to make an appointment with a salon; throttling, by the gateway API, a traffic for processing the request; structuring, by the gateway API, a cache having a defined size, data structure and forward and backward linking for handling the request; and pulling, by the gateway API, a configuration file from a dynamic database that provisions resources only when requested.

[0009] The present invention relates generally to a demand generation platform implemented with serverless computing architecture. The demand generation platform dynamically responds to service requests without maintaining a fixed amount of computational resources. The present specification further discloses application management using the demand generation platform implemented with serverless computing architecture. The demand generation platform, serverless database architecture has the benefit of being scalable to match the change of demand. A database center that operates this demand generation platform can dynamically allocate computational resources to any client/application whenever there is a need. The computational resources operated by the database center can be efficiently allocated to meet the demands. An application developer who uses the services provided by the database center, does not have to worry about the large amount of hardware investments. There is no need for the application developer to provision a piece of hardware. There is no need for the application developer to increase or decrease the amount of physical hardware to meet the change of the demand. The demand generation platform, serverless database is event driven.

[0010] The foregoing has outlined rather broadly the features and technical advantages of the present invention in order that the detailed description of the invention that follows may be better understood. Additional features and advantages of the invention will be described hereinafter that form the subject of the claims of the invention. It should be appreciated by those skilled in the art that the concepts and specific embodiments disclosed may be readily utilized as a basis for modifying or designing other structures for carrying out the same purposes of the present

CLAIMS

What is claimed is:

1. A demand generation platform, comprising:

a salon application having an intent analyzer, on a first computing device, associated with a social media, wherein an intent for a salon service is expressed by a user on the social media and not in the salon application;

the intent analyzer deciphering the intent of the user and creating a request for a service based on the intent;

a salon service application program interface (API) finding a salon based on the request; and

a gateway API, located on a serverless backend system, wherein the gateway API controls data throttling for processing the request and creates a cache having a defined size, data structure and forward and backward linking for the request; and

a database interface responding to the request, the database interface communicating with a dynamic database that provisions resources only when requested;

wherein the demand generation platform can generate demand for the salon service without the user requesting the salon service by analyzing the intent of the user on the social media.

2. The demand generation platform according to claim 1, further comprising

a salon location finder communicating with the intent analyzer and the salon service API, the salon location finder further communicating with a map API for finding an address of the salon.

3. The demand generation platform according to claim 1, wherein

the salon service API finds the salon based on, at least in part, a location of the user and a location of the salon.

4. The demand generation platform according to claim 1, wherein

the salon service API finds the salon based on, at least in part, a time/date the user is available and a time/date the salon is available.

5. The demand generation platform according to claim 1, wherein

the salon service API finds the salon based on, at least in part, selected from the following: a service item desired, a price range desired, an identity of a stylist, an identity of a franchise of the salon, a time/date for the appointment, and a preferred amenity.

6. The demand generation platform according to claim 1, further comprising

an appointment booking engine, wherein the appointment booking engine books an appointment, confirms a check-in, allows the user to modify the appointment, and/or cancel the appointment.

7. The demand generation platform according to claim 1, wherein the database interface pulls a configuration file from the dynamic database for provisioning a table to store parameters related to the appointment.

8. A method of using a demand generation platform, the method including instructions, when executed by a processor, cause the processor to execute actions comprising

receiving, by a first processor, an indication of an intent in finding a service provided by a salon, wherein the first processor is a processor of a device, the device includes machine readable memory accessible by the first processor;

analyzing, by the first processor, the indication of the intent;

finding a salon, by the first processor, at least in part, based on the intent analyzed;

receiving, by the first processor, a request from a user to make a reservation for the salon;

communicating with a gateway API, located on a serverless backend system, wherein the gateway API controls data throttling for processing the request and creates a cache having a defined size, data structure and forward and backward linking for handling the request;

communicating, by the gateway API, with a dynamic database that provisions resources only when requested; and

responding to a request for making an appointment with the salon.

9. The method according to claim 8, wherein the analysis includes determining at least one of the following: a preferred service, a preferred hair style, a preferred price range, a preferred stylist, a preferred franchise of a salon, a preferred location, and a preferred appointment time/date.
10. The method according to claim 8, comprising

processing, by the first processor, the request using the demand generation platform.
11. A method of using a demand generation platform, the method including instructions, when executed by a processor, cause the processor to execute actions comprising

receiving, by a gateway API of a serverless system, a request to make an appointment with a salon;

throttling, by the gateway API, a traffic for processing the request;

structuring, by the gateway API, a cache having a defined size, data structure and forward and backward linking for handling the request; and

pulling, by the gateway API, a configuration file from a dynamic database that provisions resources only when requested.
12. The method according to claim 11, wherein the configuration file defines a data structure of a table for storing parameters related to the appointment.
13. The method according to claim 12, wherein the parameters include at least one of the following: an identity of a user, a location of a user, a preferred service, a preferred hair style, a preferred

price range, a preferred stylist, a preferred franchise of a salon, a preferred location, and a preferred appointment time/date.

14. The method according to claim 13, comprising
 computing, by the gateway API, the parameters and storing the parameters in the table.
15. The method according to claim 11, wherein the request includes a time/date for the appointment, or an identity of a user.
16. The method according to claim 11, wherein the request is made by a first processor independent from the gateway API.
17. The method according to claim 16, comprising
 returning, by the gateway API, a content of the request to the first processor.