Functional Specification - BGE

# Introduction

This document describes the scope and procedure for a basic service for 10th standard students on their further studies called Basic Guidance on Education (BGE 1).

## Version History

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| --- | --- | --- | --- |
| Version | Author | Published Date | Description on Changes |
| V 1.0 | Nihar | 22nd April 2018 | Initial draft. This will undergo changes based on discussion. |
| V 1.1 | NIhar | 17th June 2018 | Request Log and Register Institute sections added |

# Basic Guidance on Education

It’s a very basic product in which, guidance is given to the student based on his interest and score for the higher education. This includes two times face-to-face/Online/telephonic discussion on the below points.

## Input Parameters from the candidate:

* Name: Only for information to be stored.
* Gender: Only for information to be stored
* School/Institution: Only for information to be stored
* Address of Institution: Only for information to be stored
* Board/University: For information to be stored and as per the board, the subjects will be displayed which is to be mapped for career prospects
* Father/Guardian Name: Only for information to be stored
* Contact Phone and Mobile (should have 2 fields for phone and mobile or 2 mobile numbers and numbers can be of parents as well): Only for information to be stored
* Email: Email id of student or parents or both: Only for information to be stored
* Score (in percentage): If required we can go for subject wise break up which is optional and required only for executive reference
* Aim of Life: To be stored and to be used to decide on career prospect
* Student Opinion/Interest: for further studies whatever is in his/her mind: To be stored and to be used to decide on career prospect
* Parents Opinion: To be stored and to be used to decide on career prospect
* Location Preference: To be stored and to be used to fetch the colleges as per the location

## Guidance for the candidate (For executive reference)

* Course to be pursued:
* Time Duration of the course to be started with
* Suitable Institutions for the same course (5 suggested institutions)
* Procedure for application (Admission assistance also provided on additional cost)
* Estimated expenses during the course
* Career prospects post completion of the course

## Offerings (System Output)

Each student will get a list of 5 most suitable institutions and the details of those institutions depending on the following criteria. Kind of a doctor prescription for a student on education and can be given to the student (printout or email)

* Discipline/stream of Interest: As entered by the user
* Score in the 10th exam
* Location Preference
* Hostel Facilities
* Coaching Facilities

## Example:

A student appears to take this service. His/her input is as follows which has to be fed to the system by the executive:

### Student Information – Data to be analysed

* Board/University: Considered for analysis based on the subject availability
* Score (in percentage): If required we can go for subject wise break up which is optional and required only for executive reference
* Aim of Life
* Student Opinion/Interest: for further studies whatever is in his/her mind
* Parents Opinion:
* Location Preference (1st option is to select a state or Anywhere in India, 2nd field for a specific city from dropdown list-with multi-select functionality)

### Guidance for the Candidate – Interim Output

(Output but not to be given any print out-only for executive reference)

* Course to be pursued: This is based on the career option. Alexa wanted to be a doctor. So she has to undergo PUC, Attend NEET exam, Pursue MBBS, and Finally PG
* Time Duration of the course to be started with: 10+2 is for 2 years, MBBS is for 4 years
* Suitable Institutions for the same course (5 suggested institutions): Only for 10+2 colleges from our college data base based on score and preferred location
* Procedure for application (Admission assistance also provided on additional cost): Again from college DB
* Estimated expenses during the course: From college DB
* Career prospects post completion of the course: From Career DB

### Final Output to be given to student/parents

Five most suitable colleges to be displayed based on course, score card, and location only.

The following details of the colleges to be provided:

* Name
* Address
* State Rank
* Last year cut-off (Lower cut-off and higher cut-off)
* Expected Cut-off for this year: (Lower cut-off and higher cut-off)
* Application Date: Start Date and End date
* Mode of Application: Online/Offline/both
* No of seat for that course/discipline
* Hostel Capacity (For boys and girls)
* Out of campus boarding Facility (Yes/No)
* Approximate Course Fee
* Approximate Hostel Fee
* Approximate Other Expenses
* Approximate Total Expenses

Disclaimer: Advisory information for guidance only. Admission is under sole discretion of the institute.

### Request Log

The above response from the system has to be logged in the system and the log should be able to provide the request number with all the input parameter and output parameters. The output can be displayed in a normal html page or can be downloaded as pdf file. The same pdf file can be printed and handed over to the respective student.

# Register Institute

This is a workflow that helps the executive to capture the details about the educational institutes which is used in various services for the students.

The first screen of the “Register Institute” will allow the user to capture the following information about the institute.

* State: Which state the institute is situated. A drop-down listing all the states of the country.
* District: Which district the institute is situated of the selected state. A drop-down listing all the districts of the selected state.
* City: Which locality the institute is situated. A text field can be further improved for making a dropdown.
* PIN: Postal code of the location of the institute.
* Name: Full name of the institute. Text field of size 60.
* Address: Further details of the address. Previous address related information may not be required to capture. Text field of size 100.
* Web: Website address.
* Email: Email address with standard email syntax validation.
* Phone 1: Phone Number with std code.
* Phone 2: Phone number with std code especially to be admissions department.
* Affiliation: This is the board to which the institute is affiliated. It talks about the curriculum.
* Estd: Generic information in which year the institute is established. Four digit numeric validation. Eg: 1955
* Institute Type/Courses: This provides the information about various courses that are available or provided by the institute. How to store this information.
* Static checkboxes are provided for the various courses, User will select the respective courses based on the availability of the same in the institute.

On click of Save, this will be inserted as a new row to the respective table. On successful saving, the system will go to the next screen for the other details of the institute.

While inserting data to the institute table, the system must check the availability of the same institute and must restrict the duplicate entry. System first checks the PIN code, if the same PIN code is already available, then system must check ESTD year and the name of the college. It will allow, if the combination is not available in the system.

If same combination is already available, system should tell the user; this institute record is already available in the database. Do you want the see the record? On click of OK, the same institute record will be displayed and user should be able to edit/modify the same. This modification is allowed for the executive of the same locality/district.

Second screen of “Register Institute” will allow the user to capture the following information. The second page appears based on the courses selected on the previous page. For example, two types of courses are selected as +2 and +3. Then second page will ask for the +2 details and 3rd page will ask for +3 details. Each page will display the fields as per the courses.

For 10+2:

* Stream: Stream is a drop down listing Arts, Science, Commerce.
* Capacity or strength: Numeric field for capturing number seats for the selected course/stream.
* Duration: Ideally auto-populated and can also be a drop down. Duration should be in number of years.

# Database:

Some more tables are required and will be added/modified based on the further discussion. For detailed information on the table, refer to the respective spread sheet.

* Executives/User: Basically for the end user (for employees/ company executive who has access to use our application. (Including students as users is currently out of scope but same will be added later)
* University Table: List all the universities or boards and the details
* Student Table: Should contain all the collected information of the student.
* College Table: All information about the colleges
* Career Table: List all the career option along with the details of the education

# Institute Rank Management

System should capture the lowest percentage of mark of the student who could took admission and highest percentage of mark who was admitted to the institute from 2015 onwards. System should be able to display last three years of information and forecast for the current year score range. Accordingly the ranks will be adjusted depending on the lowest score. Higher lowest score of that particular stream can be ranked 1 and continued accordingly in descending order.