



# Smart Go Kart System with using Conversational Dialog Engine

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**Abstract:** In this paper we propose a Go-Kart Management System. This system allow user to register into the system and registered user allow to login to the system. This web based application introduce to organize the activities regarding go-karts event like participation in Go-Kart ,building electric or general go-karts, team activity, performance, etc. Through system, user can allow to participate in ongoing race event or proposing the Go-Kart Vehicle Design. The database stores all of the user's information as well as their communications.

**Keywords:** *User, Admin, Event, Chatterbot, Conversational Dialog Engine Chobot, Go Kart.*

## •INTRODUCTION

In today's world everything is being online and present in digital way which saves our time and efforts as well. Similarly, Go-Kart is the web application which provide online platform for the Go-Kart events and its management. It is the application which is applicable for the individual colleges. Student will register on Go-kart platform and build profile, Go-Kart manage all data regarding user perceptions and it stores and updating all the information about the live events of Go-Kart. The system will handle by the admin who is observer as well provider. Admin can access and provide all data and also keep track on the participant live activities regarding those projects. This platform is intended to remain simple and powerful to connect student with the head of Go-Kart organizer and with respect to their college.

## •LITERATURE SURVEY

AUTHOR	TITLE	CONCLUSION
Jianzhong Li, Jun Han, Zhuqing Li, Yongwang Zhao 2012	A Component-based Integrated Management Framework for Web Service Platforms	In this paper, we introduced a component-based management framework with better customizability and extensibility for web service platforms.
Joaquin Mora Larramoa , Leire Romero Elu 2010	Development and kart's competition driven by PEMFC	The knowledge generated at this project will be applied into future projects at Foundation for the Development of New Technologies regarding Kart.
Karl Perusich 2016	An Electric Go-Kart Camp to Attract High School Students to a STEM Career	In conclusion, the goal of the summer go-kart camp is to introduce high school students to the "fun" of STEM by using an integrative approach that melds theory with practice and measurement with driving.
Sadeq Al-Turf 2017	Best practices of project team tracking	Introduced new methodology to improve task management of team
Saurabh Srivastava, T.V.Prabhakar 2020	Desirable Features of a chatbot building Platform	Chatbot are one of the most popular humanise interfaces to systems today. Many commercial chatbot-building platforms have cropped up in the past few years.

**Fig 1 Survey Papers**

Paper 1: A component based integrated management framework for web service platforms

First paper, it describe to creating the integrated management framework or system using web service platform or portal. Using management framework it increase customizability and extensibility of service which is provided through web platform.



Paper 2: Development and Kart’s competition driven by PEMFC

In second paper, we get this innovative idea which we can provide to the colleges and universities. We get the acknowledgement regarding the benefits which is provided to student to increase their skill and future project for the development of new technologies regarding kart.

Paper 3: An electric go kart camp to attract high school student to a STEM carrier

From this paper, we get to know how we can provide this feature for student in their academics. So, the students get theory with practice on real time work on project.

Paper 4: Best tracking for project team practice

From this paper, it describes the faculty, staff and seniors can collaborate with the student and teams to help them in the development and tracking their activities.

Paper 5: Desirable features of a Chabot building platform

From this paper, we can develop Chabot technology which is introduced in the system.

**• COMPARISION OF EXISTING AND PROPOSED SYSTEM**

In a various colleges, they are having their college team who works on the Go-Kart project for its designing and manufacturing. So each college having head of these events that needs to manage the student manual registration and project documents. Head of the event have to collect the information of various Go-Kart live events time to time and notify same to the students manually. For the instructions and updates, head needs to present physically to guide the students. Head required all the status regarding project task in a documental way.

As we experience in our college, managing all the activities regarding Go-Kart event and its project Development manually right from student registration to event final activity. So this process consume Time and efforts and sometimes student don’t aware about the upcoming events and registration. Using real time responsive digital platform, we can avoid all these situations. Solution to this refers an online platform through which communication between the participants and college staff. Student updated and stays tuned regarding activities and current project tasks. So student will get opportunities and enhance their knowledge in practically.

**• BLOCK DIAGRAM**

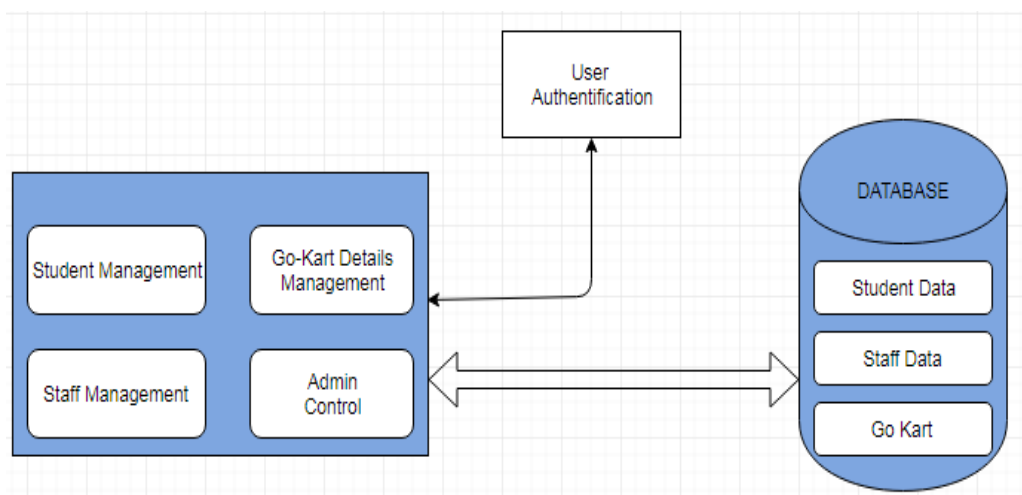


Fig 1. Block Diagram

**MODULES:****A. Smart Go Kart web app:****• Staff Management**

Admin can provide or assign staff authority to the management user i.e., faculty, professors and senior members. They can manage all the data regarding student and events. In this module, it having seven component i.e. Home, Event, Show All News, News, Add Event, Consolidated View and

1. Home-It redirect to Home Page after the particular action to be taken.
2. Event- It displays the event which exists and created in the application.
3. Show All News- It display all the news that is created by other staff.
4. News- Using this component, we can add the upcoming event poster or picture.
5. Add Event- Staff can able to add the event with assign restrictions as well.
6. Consolidated View- It shows the event data as a form of summary.
7. Logout- User logout from this system.

**• Student Management**

Students having unique credential through which they can access their account. Student can participate in the event which is conducted by college or any organization. This module contains five components i.e. Home, Event, Show All News, Consolidated View and Logout.

1. Home-It redirect to Home Page after the particular action to be taken.
2. Event- It displays the event which exists and created in the application.
3. Show All News- It display all the news that is created by other staff.
4. Consolidated View- It shows the event data as a form of summary.
5. Logout- User logout from this system.

**• Admin**

The system having unique or single operator who work on to provide essential needs to the student or user with respect to events, project development and manage the other requirement. Admin can manage student, staff and event data as well. This module has eight components i.e. Home, Event, Show All News, News, Manage User, Generate Report, Consolidated View and Logout.

1. Home-It redirect to Home Page after the particular action to be taken.
2. Event- It displays the event which exists and created in the application.
3. Show All News- It display all the news that is created by other staff.
4. News- Using this component, we can add the upcoming event poster or picture.
5. Manage User- This component describes the staff details and admin can update the staff data also.
6. Generate Report- Display the event activity and also admin can generate the report of registration and enrolled student data.
7. Consolidated View- It shows the event data as a form of summary.
8. Logout- User logout from this system.

**• Chabot**

Conversational Dialog Engine is used for developing Chabot system. Chabot system require python library that is chatter-bot. It uses a machine learning algorithm i.e. Logic Adaptor.

Configuration of Chabot-

Working:

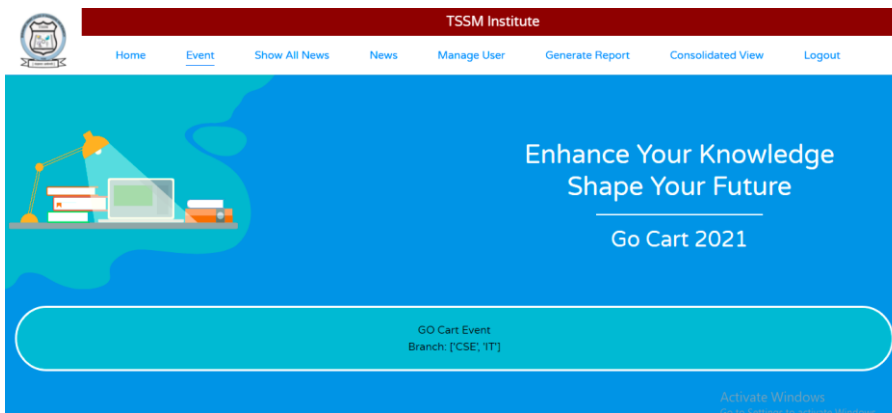
- a.Go Kart web application works with all commonly used web browsers like GoogleChrome, Mozilla Firefox, Opera, Microsoft Edge, etc.
- b. Provide the real time email verification of existing user for authentication and security purpose.
- c.All three category of users i.e. Admin, Staff and student can access features.
- d. Generate the report of registered and enrolled students.
- e.Chabot system work as service provider.



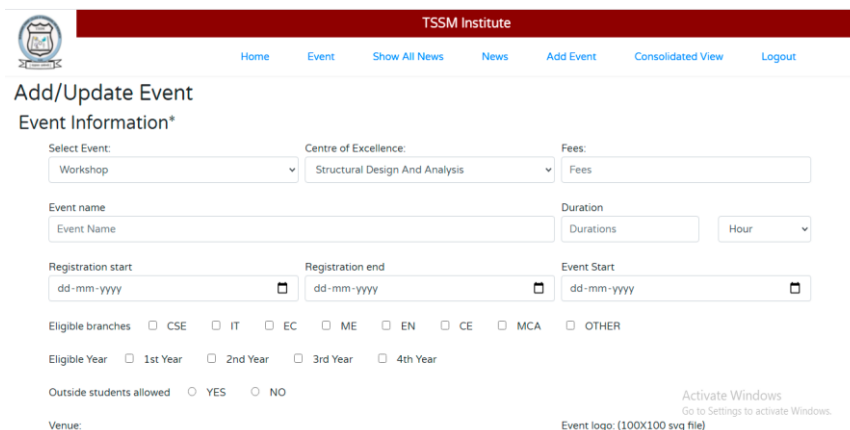
```
chatbot.py
# Creating ChatBot Instancecd
13 chatbot = ChatBot(
14     'CoronaBot',
15     storage_adapter='chatterbot.storage.SQLiteStorageAdapter',
16     logic_adapters=[
17         'chatterbot.logic.MathematicalEvaluation',
18         'chatterbot.logic.TimeLogicAdapter',
19         'chatterbot.logic.BestMatch',
20         {
21             'import_path': 'chatterbot.logic.BestMatch',
22             'default_response': 'I am sorry, but I do not understand. I am still learning.',
23             'maximum_similarity_threshold': 0.60
24         }
25     ],
26     database_uri='sqlite:///database.sqlite3'
27 )
28
29
30 # Training with Personal Ques & Ans
31 training_data_quesans = open('chatbot_new/training_data/quas_ans.txt', encoding='UTF-8').read().splitlines()
32 training_data_personal = open('chatbot_new/training_data/personal_quas.txt', encoding='UTF-8').read().splitlines()
33
34 training_data = training_data_quesans + training_data_personal
35
36 trainer = ListTrainer(chatbot)
37 trainer.train(training_data)
38
```

**B. Result:**

1. Admin

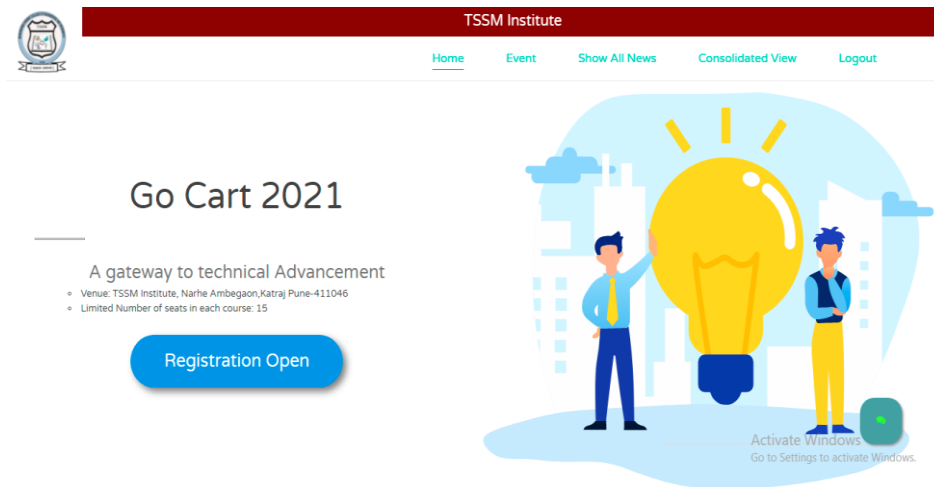


2. Staff





## 3. Student



## 4. Chabot System



## •CONCLUSION

In this project, we develop and implemented the Go-Kart system which is a web portal through which students of the Mechanical Engineers, Electrical Engineers and Electronics Engineer are participate in Go-Kart vehicle development and design at one place. Because in world, electric vehicles are widely use. It creates efficient collaboration between the teams and organize event by college or any other organization to enhance the skill of students.

## •REFERENCES

- [1]Perusich, K., "An electric go-kart camp to attract high school students to a STEM career." 2016 IEEE Integrated STEM Education Conference, 2016. pp 13-15
- [2] Jablonski, E., Vigeant, M., . "Engineering Camp: a .residential experience designed to build academic capital in pre- .college students" ASEE Annual Conference & Exposition. 2014
- [3]Perusich, K., "An electric go-kart camp to attract high school students to a STEM career PHASE II" 2018 IEEE Integrated STEM Education Conference, 2018
- [4]Martin, C., Erte, S., Pinkard, N., August 2015. "Developing Focused Recruitment Strategies to Engage Youth in Informal Opportunities." Research in Equity and Sustain Participation Engineering, Computing, and Technology.
- [5] Design and Development of a Go Kart, Tyrone Machado, Prof. Vijay Kulkarni, Mechanical Engineering, *DBIT, Mumbai*.