Behavioral Modeling

State Transition Diagram

State diagram represents active states for each class of events (triggers). For this we identified all the events, their initiators and collaborators.

Identifying events

Serial	Event	Event Name	Initiator	Collaborator
1.	Sign up	sign_up	User	
2.	User login	login	Registered_User	
3.	Password Recover	recover_password	Registered_User	Admin
4.	View general facts of country	view_general_facts	User	Country
5.	View historical facts of country	view_historical_facts	User	Country
6.	View cultural facts of country	view_cultural_facts	User	Country
7.	View sports facts of country	view_sports_facts	User	Country
8.	View forms of government of country	view_forms_of_government	User	Country
9.	View travel facts of country	view_travel_facts	User	Country
10.	View unions of country	view_union_facts	User	Country
11.	View physiographic geological feature of the ocean & seas	view_physiographic_feature	User	Ocean & Sea
12.	View economic aspects of ocean & seas	view_economic_aspects	User	Ocean & Sea
13.	View multiple choice question	view_mcq_questions	Registered_User	Multiple Choice Questions
14.	Choose option	choose_option	Registere	Multiple Choice

			d_User	Questions
15.	View unmarked map	view_unmarked_map	Registered_User	Gaming quiz
16.	Click on correct option	click_on_correct_option	Registered_User	Gaming quiz
17.	View active user	view_active_user	Chat	Registered_User
18.	Send chat request	send_chat_request	Chat	Registered_User
19.	Accept or deny chat request	accpet_deny_chat_request	Chat	Registered_User
20.	Chat	chat	Registered_User	Chat
21.	Generate OTP	generate_OTP	Email	
22.	Send OTP	send_OTP	Email	Registered_User, Admin
23.	Set Question	set_question	Admin	Multiple choice question
24.	Set Level	set_level	Admin	Multiple choice question
25.	Change information	change_info	Admin	Registered_User, Country, Ocean & Seas, Multiple choice question
26.	Make active user list	make_active_user_list	Chat	Registered_User
27.	Show physiographic geological feature of the ocean & seas	show_physiographic_geologic_feature	Ocean & Seas	User
28.	Show economic aspects of the seas & oceans	show_economic_aspect	Ocean & Seas	User
29.	Show general facts	show_general_facts	Country	User

30.	Show history related information.	show_history	Country	User
31.	Show culture based information	show_culture	Country	User
32.	Show sports related information	show_sports	Country	User
33.	Show forms of government marked on the map	show_forms_of_government	Country	User
34.	Show famous travel destinations	show_travel_place	Country	User
35.	Show unions of the world	show_unions	Country	User
37.	Showing questions to the user	show_question	Multiple choice question	Registered_User
38.	Updating the scoreboard	update_score	Multiple choice question	Registered_User
39.	Showing an unmarked map.	show_unmarked_map	Gaming Quiz	Registered_User
40.	Show questions on the screen	show_question	Gaming Quiz	Registered_User
41.	Update XP points.	update_XP_points	Gaming Quiz	Admin
42.	Update leaderboard.	update_leaderboard	Gaming Quiz	Admin
43.	Update the level of the player.	update_level_of_player	Gaming Quiz	Admin