Group H Climate Awareness Application Proposal

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Project Idea:

The application is designed to support the achievement of SDG goal 13: Take urgent action to combat climate change and its impacts. There will be four sections with each identifying a specific Climate Action Target. We are taking an interactive game-based approach with the hope of spreading vital information enjoyably and interactively.

Section 0: Collaboration of everyone.

This section will contain a main menu for selecting which section to explore.

Section 1: Conor Judge- 22165398.

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

This section will have an interactive quiz that presents educational content related to climate change in the form of multiple-choice and true/false questions. A User's name will be stored with their score for the quiz. Explanations and further context are given for incorrect answers to encourage further engagement. The quiz will have a dynamic interface incorporating text and images.

Section 2: Eoin Fitzsimons- 23151374.

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

This section features a crossword where the clues have context surrounding them, an example would be for the answer acid rain – a downpour caused by the mixture of sulphur, nitrogen, and precipitation in the air. It destroys crops and poisons the soil. Information will allow adaptation.

There will be a scoring system for users to feel an extra sense of reward alongside being educated in important matters to our ecosystem. Also included will be a hints system which will give the user a letter within the answer to lead them along the right track.

Section 3: David O Connor- 23153784.

13.2 Integrate climate change measures into national policies, strategies, and planning.

This section focuses on how nations have caused global warming, and how nations have changed their approach towards their actions in hopes of preserving the environment and to battle against climate change.

A card game will be introduced that will present a random card from the pile. Users can choose from three options, and only one option will be the correct answer. The card will supply a scenario and the answers will be the solution to the scenario.
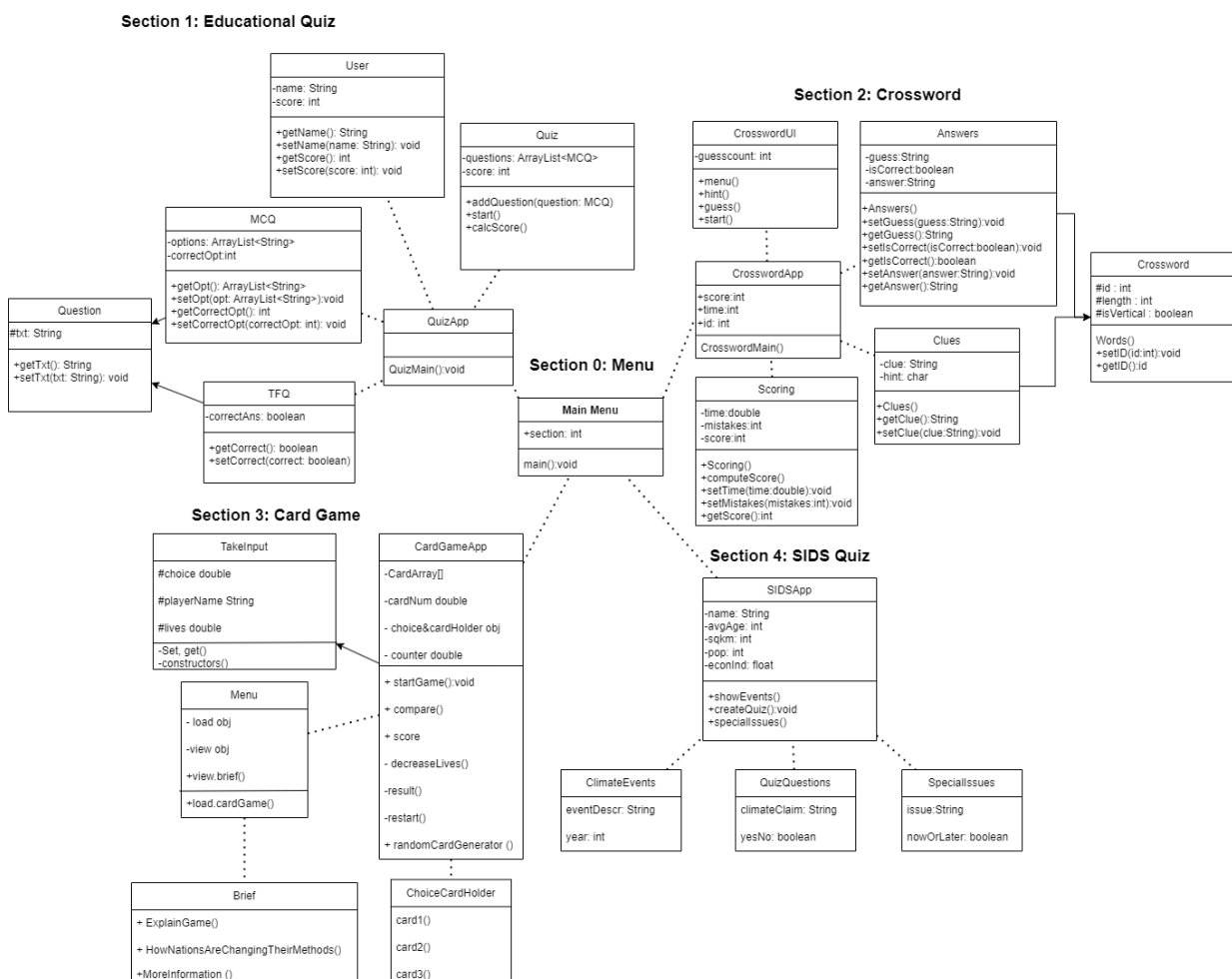
13. b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and Small Island Developing States (SIDS).

This section highlights the Small Island Developing States and their special vulnerability to climate change and the special efforts that they are having to make in response to it.

There will be an interactive game that presents the challenges showing the impact of climate change for the people living in these SIDS. The player will first be presented with a list of the island states and will select one. The player will then be presented with information about past climate events and future risks and concerns. This will be followed by a true or false quiz relating to that Small Island Developing State.

Group H: Climate Change Class Diagram

Section 1: Educational Quiz

User
-name: String
-score: int

+getName(): String
+setName(name: String): void
+getScore(): int
+setScore(score: int): void

Quiz
-questions: ArrayList<MCQ>
-score: int

+addQuestion(question: MCQ)
+start()
+calcScore()

MCQ
-options: ArrayList<String>
-correctOpt:int

+getOpt(): ArrayList<String>
+setOpt(opt: ArrayList<String>):void
+getCorrectOpt():int
+setCorrectOpt(correctOpt: int): void

Question
#txt: String

+getTxt(): String
+setTxt(txt: String): void

TFQ
-correctAns: boolean

+getCorrect(): boolean
+setCorrect(correct: boolean)

QuizApp
QuizMain():void

Section 2: Crossword

CrosswordUI
-guesscount: int

+menu()
+hint()
+guess()
+start()

CrosswordApp
+score:int
+time:int
+id: int

CrosswordMain()

Answers
-guess:String
-isCorrect:boolean
-answer:String

+Answers()
+setGuess(guess:String):void
+getGuess():String
+setIsCorrect(isCorrect:boolean):void
+getIsCorrect():boolean
+setAnswer(answer:String):void
+getAnswer():String

Clues
-clue: String
-hint: char

+Clues()
+getClue():String
+setClue(clue:String):void

Scoring
-time:double
-mistakes:int
-score:int

+Scoring()
+computeScore()
+setTime(time:double):void
+setMistakes(mistakes:int):void
+getScore():int

Crossword
#id : int
#length : int
#isVertical : boolean

Words()
+setID(id:int):void
+getID():id

Section 0: Menu

Main Menu
+section: int

main():void

Section 3: Card Game

TakeInput
#choice double
#playerName String
#lives double
-Set, get()
-constructors()

Menu
- load obj
-view obj
+view.brief()
+load.cardGame()

CardGameApp
-CardArray[]
-cardNum double
- choice&cardHolder obj
- counter double
+ startGame():void
+ compare()
+ score
- decreaseLives()
-result()
-restart()
+ randomCardGenerator ()

Brief
+ ExplainGame()
+ HowNationsAreChangingTheirMethods()
+MoreInformation ()

ChoiceCardHolder
card1()
card2()
card3()

Section 4: SIDS Quiz

SIDSApp
-name: String
-avgAge: int
-sqkm: int
-pop: int
-econInd: float

+showEvents()
+createQuiz():void
+specialIssues()

ClimateEvents
eventDescr: String
year: int

QuizQuestions
climateClaim: String
yesNo: boolean

SpecialIssues
issue:String
nowOrLater: boolean

Conor Judge | Eoin Fitzsimons | David O'Connor | Aaron Eppelbaum