Class Diagram

Tag
- tid: String (Unique)
- name: String

+ showTagsQuestions(String): void
+ viewTags(): void
+ getTagCount(): int
+ getTagQuestionList(): Array
+ findMatchingQuestion(String): Array

Application
+ activateLink(HTMLElement, HTMLElement): void
+ initializeEventListeners(HTMLElement, HTMLElement): void
+ setupSearchListener(): void
+ performSearch(String): void

association 1..* — 1

Question
- qid: String (Unique)
- title: String
- text: String
- askDate: Date
- views: Integer
- askedBy: String
- tagIds: List<String>
- ansIds: List<String>

+ setupNewQuestionListener(): void

Data Handler
+ getSortedAndFilteredQuestions(sortType: string): Array
+ displayQuestions(sortType: string, questionsArea: HTMLElement, totalQuestionsSpan: HTMLElement, searchTerm?: string, customQuestions?: Array, isDefaultDisplay?: boolean): void
+ getLatestAnswerDate(question: Object): Date
+ formatDate(date: Date): string
+ getRelativeTime(pastTime: Date): string
+ displayAnswerPage(questionId: number|string): void

Answer
- aid: String (Unique)
- text: String
- ansBy: String
- ansDate: Date

+ addAnswer(): void
+ validateAnswer(questionId: string|number, userName: string, answerText: string): Boolean

depends, *utilizes*, *contains*
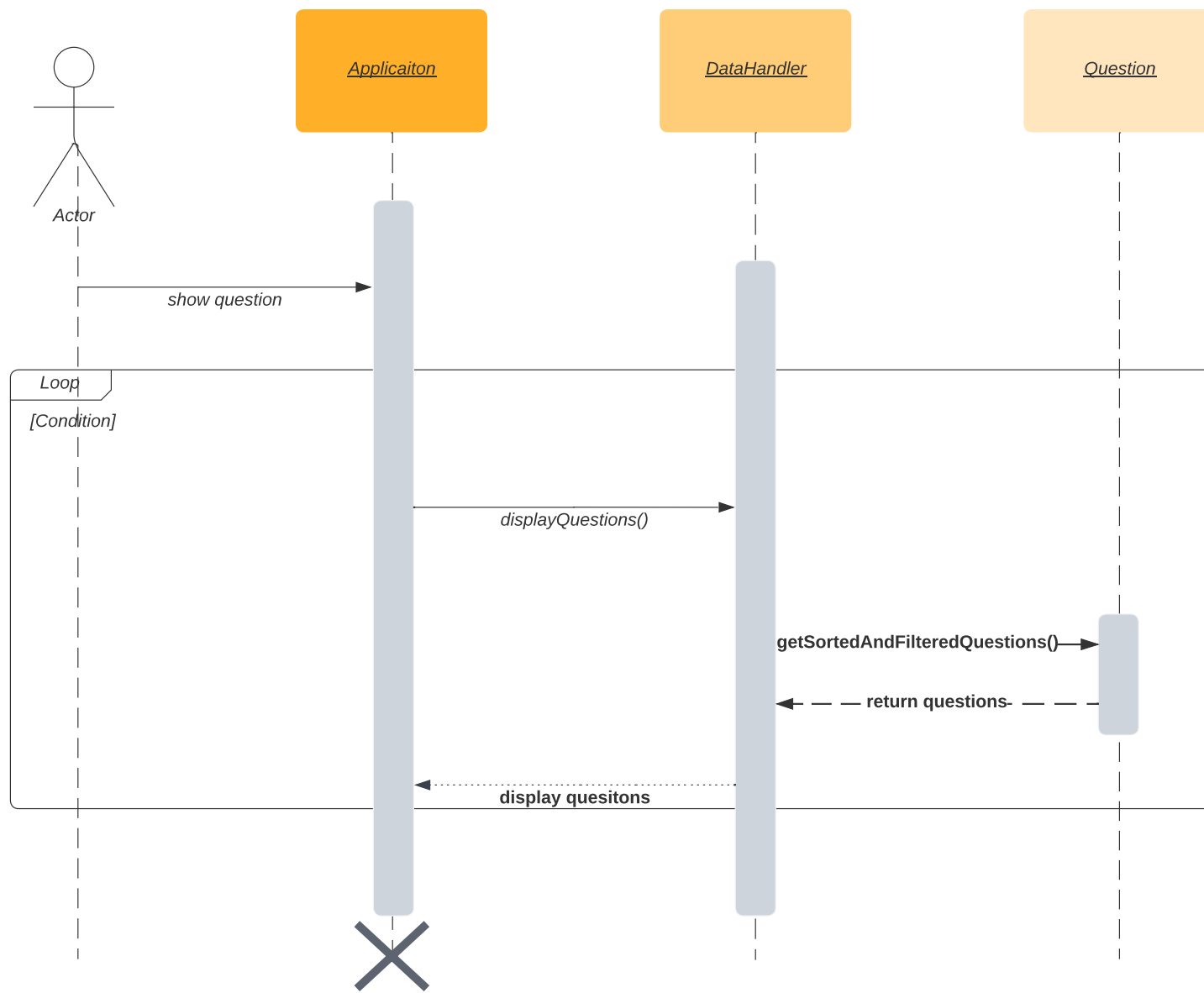

Tag Retrieval and Display:
Venya Knyazev | October 13, 2023

Actor → Applicaiton: see tags
Applicaiton → DataHandler: showTagsQuestions()
Loop [Condition]
DataHandler → Tag: getSortedAndFilteredQuestions("tagsortType")
Tag --> DataHandler: --list of tags--
Applicaiton → Actor: display tags

Searching for Questions:
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Actor → Application: search bar
Loop [Condition]
Application → Application: searchListner()
Application → Data: performSearch()
Data --> Application: displayQuestions()

Question Retrieval and Display:
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Actor → Applicaiton: show question
Loop [Condition]
Applicaiton → DataHandler: displayQuestions()
DataHandler → Question: getSortedAndFilteredQuestions()
Question --> DataHandler: --return questions--
Applicaiton → Actor: display quesitons

Adding an Answer to a Question:
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Actor → Application: post answer
Loop [Condition]
Application → Application: validateInput()
Application → Answer: addAnwer()
Answer --> Application: --new asnwer--
Application → Actor: show new answer