Questionnaire for final year project of Jane

Name: Veronica

Year: 3

1. Compared with your previous methods to learn Data Structures and Algorithms, do you feel more intuitive by playing around with this demo?

It is actually a quite new way to practice. Comparing to the traditional paperwork, it is much more interesting. In addition, some beginners are not familiar with the knowledge. They may encounter blank brain when in face of the assignment. This way could help them a lot to get familiar with it.

1. //Do you think this project useful for students learning Data Structures and Algorithms? Could you tell the reason why it is useful or not?
2. If you are teacher, do you prefer the method you have learned or the method in this demo? Briefly explain why?

Yes demo.

It will stimulate the desire of students to practice this kind of knowledge. And it will make the class more vivid and interesting.

1. Based on this demo, which functionalities () do you think are helpful for teachers to teach data structures and algorithms?

Algorithm Comparison. Some algorithms are quite similar and they may cause a lot of confusion between students. When they have chance to practice on this website, it will make deep impression on them when they make some mistake during dragging. Even though they have no idea where to put blocks ,they could get the correct answer by trying again and again. In this case, they may memorize and understand it better.

1. Based on this demo, which functionalities () do you think are helpful for students to learn data structures and algorithms?
2. Which functions () do you think need further improvement? In what specific areas?

No

1. Do you have some other comments?

‘Hello,xxxx’ needs to be placed just near ‘Logout’.

Some code lines which are independent from each other are not supposed to be placed in sequence in answer.

Teachers’ personal center need to have the maximum and minimum zhongweishu score of students.

Name : Tony Grade :third year

1. Compared with your previous methods to learn Data Structures and Algorithms, do you feel more intuitive by playing around with this demo?

That can increase the fun of study and make easy to understand about the difficult points.

1. //Do you think this project useful for students learning Data Structures and Algorithms? Could you tell the reason why it is useful or not?
2. If you are teacher, do you prefer the method you have learned or the method in this demo? Briefly explain why?

Yes, because if student directly write the code that make some students stay in the trouble status, it can be improved by using this method.

1. Based on this demo, which functionalities () do you think are helpful for teachers to teach data structures and algorithms?

Algorithm comparison.

1. Based on this demo, which functionalities () do you think are helpful for students to learn data structures and algorithms?

Algorithm comparison

1. Which functions () do you think need further improvement? In what specific areas?

No

1. Do you have some other comments?

No

Name : Eden Xiang Grade : 4

1. Compared with your previous methods to learn Data Structures and Algorithms, do you feel more intuitive by playing around with this demo?

It is a good attempt, online quiz is more easier to manage and more fun! but it still have some constraints like the limitation of the device.

1. //Do you think this project useful for students learning Data Structures and Algorithms? Could you tell the reason why it is useful or not?

//

1. If you are teacher, do you prefer the method you have learned or the method in this demo? Briefly explain why?

目前的功能仍然不太完善，想要完整地出一道题较为难以操作，甚至可能比出纸质quiz的效率更低。但是如果能够支持更多的功能以及更加快速方便地操作的话使用这个是一个节约用纸的好方案，同时也可以减少很多阅卷负担。学生也可以自主地去进行训练（时间更加自由，更加个性化）

1. Based on this demo, which functionalities () do you think are helpful for teachers to teach data structures and algorithms?

可以调节难度可以让老师更加方便针对性地根据全班学生的实际学习情况来调整难度，同时一定程度上也能够防止两个半的同学之间进行抄袭。

Group方法是一个很好的设计。能够更好地展现代码结构。对于编程初学者来说是非常必要的提示

1. Based on this demo, which functionalities () do you think are helpful for students to learn data structures and algorithms?

学生也可以自主地去进行训练（时间更加自由，更加个性化）

1. Which functions () do you think need further improvement? In what specific areas?

Indent操作有些过于繁琐。

1. Do you have some other comments?

UI还有很多的提升空间，比如拖拽操纵不够顺畅。创建一个题目需要确认的步骤有些繁多导致出题的效率以及整体体验不是很好

可以考虑添加一个题目搜索功能，这样更够更加方便地找到题。

Name:Grant Year: 3

1. Compared with your previous methods to learn Data Structures and Algorithms, do you feel more intuitive by playing around with this demo?

我认为这个demo更直观，因为这个demo的每个题目都有完成这道题的所有代码，并且以拖拽的方式可加强学生与题目的互动性，使学生更方便地学习Python

1. //Do you think this project useful for students learning Data Structures and Algorithms? Could you tell the reason why it is useful or not?

我认为这对学生学习Data Structure and Algorithms很有帮助，因为对于没有学过的学生，有代码的提示能帮助学生更快速的学习语法知识。

1. If you are teacher, do you prefer the method you have learned or the method in this demo? Briefly explain why?
2. Based on this demo, which functionalities () do you think are helpful for teachers to teach data structures and algorithms?
3. Based on this demo, which functionalities () do you think are helpful for students to learn data structures and algorithms?

我认为更换难度和拖拽这两个功能很有用，因为更换难度可以帮助不同水平的学生更好的学习，拖拽的方式可以使学生更方便地学习

1. Which functions () do you think need further improvement? In what specific areas?
2. Do you have some other comments?

UI: 在学生界面，可以在学生做过的题目右边显示这个学生在这道题得的最高分和日期

Questionnaire for final year project of Jane

Name: 何智谦

Year: 3

1. Compared with your previous methods to learn Data Structures and Algorithms, do you feel more intuitive by playing around with this demo?

可以更清楚了解到学校学到的知识，但是只有排序学习方法，可能比较单一，再多点模式我会很想去学习！

1. If you are teacher, do you prefer the method you have learned or the method in this demo? Briefly explain why?

用这个demo比较好，因为是电脑一起学习，写代码老师要一个个看，效率比较低，然后这个对新手来说人门比较简单。

1. Based on this demo, which functionalities (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think are helpful for teachers to teach data structures and algorithms?

check and feedback，switch difficulty level

老师可以通过查阅分数实时知道学生成绩。

1. Based on this demo, which functionalities (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think are helpful for students to learn data structures and algorithms?

check the feedback, switch difficulty level, drag and drop

对于学生，可以通过交答案也看到哪里对和错，实时改正，修改自己的错误。

对于不同的学生程度分出相应的难度，循序渐进的练习更有利于学习。

代码不需要自己打，更省时，也不怕打错多了空格系统不承认，但是不适合基础不太好的学生，因为学校考试还是需要自己手写。

1. Which functions (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think need further improvement? In what specific areas?

5. difficulty level, record

可能有更多的练习，或者再细分一个level随机出一题，或者让学生选练习几。

老师系统界面可以出现几秒的弹窗提醒，哪个学生交了什么练习，通过点击可以直接跳转到详细分数界面。

1. Do you have some other comments?

如果我这一届也可以这样学习就好了！[流淚]学姐快出

Questionnaire for final year project of Jane

Name: Steve

Year: 4

1. Compared with your previous methods to learn Data Structures and Algorithms, do you feel more intuitive by playing around with this demo?

Yes, compared with traditional methods, the demo you purposed has achieved a intuitive experience to me when playing around with it. However, using drag-and-drop may lead to a problem that the degree of wisdom has been declined.

1. If you are teacher, do you prefer the method you have learned or the method in this demo? Briefly explain why?

Neutral, since I had mentioned when answering to the last question, students may be remember an order of to arrange the code blocks without having further understanding of how it should be arranged into this particular order. That is because learning coding and algorithms needs continuous feedback (output) from the current program, to achieve this, you may need to make the code really running on your browser and let them have a chance to take a look at how it happening (such as the orders of variables are in an array in teaching sorting algorithms), in total; It is better to have a “debug” window to display each variables’ value.

1. Based on this demo, which functionalities (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think are helpful for teachers to teach data structures and algorithms?

check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class.

1. Based on this demo, which functionalities (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think are helpful for students to learn data structures and algorithms?

drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class

1. Which functions (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think need further improvement? In what specific areas?

Combination of functions such as combining steps and show context

1. Do you have some other comments?

Refers answers to Q2. 🥳

Questionnaire for final year project of Jane

Name: Kevyn

Year: 4

1. Compared with your previous methods to learn Data Structures and Algorithms, do you feel more intuitive by playing around with this demo?

Yes, basically because I only need to due with the existing options

2. If you are teacher, do you prefer the method you have learned or the method in this demo? Briefly explain why?

It depends, maybe I will adopt different methods to different students.

3. Based on this demo, which functionalities (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think are helpful for teachers to teach data structures and algorithms?

**record, manage system:** If I am the teacher, I would have a strong intention to grasp the learning progress of my students, so the record and management system in the demo will be helpful to let me have a clear view of the whole class’s learning situation.

4. Based on this demo, which functionalities (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think are helpful for students to learn data structures and algorithms?

**drag and drop**: Writing code from nothing is too hard for the novice, this demo allow learners to choose from options, which will be certainly easier.

**algorithm comparison**: Comparison after doing the exercises will be an important stage in the learning process.

5. Which functions (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think need further improvement? In what specific areas?

drag and drop, check and feedback

**check and feedback:** it will be great if the system can provide intelligent explanations of the code or answer. (Maybe use GPT to achieve it)

6. Do you have some other comments?

JaneJaneNB

Questionnaire for final year project of Jane

Name: Stephen

Year: 4

1. Compared with your previous methods to learn Data Structures and Algorithms, do you feel more intuitive by playing around with this demo?

我认为该方法对于新接触数据结构与算法的学生而言会更加容易上手。

1. If you are teacher, do you prefer the method you have learned or the method in this demo? Briefly explain why?

如果我的学生是未接触过数据结构和算法的学生，我会使用该方法，因为该方法允许新入门的学生暂时忽略一些语法细节。

1. Based on this demo, which functionalities (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think are helpful for teachers to teach data structures and algorithms?

manage system for question

1. Based on this demo, which functionalities (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think are helpful for students to learn data structures and algorithms?

check and feedback

1. Which functions (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think need further improvement? In what specific areas?

switch difficulty level, 可能今后可以在这方面有更多的多样性。

1. Do you have some other comments?

Questionnaire for final year project of Jane

Name: King

Year: 4

1. Compared with your previous methods to learn Data Structures and Algorithms, do you feel more intuitive by playing around with this demo?

Yes. Comparing with my previous methods to learn Data Structures and Algorithms, this demo makes the process easier.

1. If you are teacher, do you prefer the method you have learned or the method in this demo? Briefly explain why?

I prefer the method inside the demo because it's more intuitive than the method I learned before and it's very friendly for people who are just starting to learn programming.

1. Based on this demo, which functionalities (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think are helpful for teachers to teach data structures and algorithms?

The two functions of check and feedback, and algorithm comparison can help teachers. The first point is that these two functions may reduce the teacher's workload, and the students themselves can obviously know where their mistakes are, and the second point can help the teacher expand the students' ideas.

1. Based on this demo, which functionalities (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think are helpful for students to learn data structures and algorithms?

Drag and drop. Because this allows students to focus on how to solve the problem rather than having to worry about the small bugs of the code.

1. Which functions (drag and drop, check and feedback, switch difficulty level, show context, multiple step, algorithm comparison, record, manage system for question, class) do you think need further improvement? In what specific areas?

Enough Perfect.

1. Do you have some other comments?

No.