

UNITY DEVELOPMENT

Congratulations, you made it to the next phase of DTT's job application procedure!

This phase will exist of a Unity test and we would like to ask you to complete this test in the [Unity Game Engine](#). Through this test, you should demonstrate that you are capable to contribute to DTT and her clients on a professional level. We work for strong international brands, such as ING, Philips, Rabobank, FOX Sports, and KPMG.

Details, quality of deliverables, and going the extra mile to satisfy the customers are crucial. This is what DTT stands for. This is also what we ask from you during this test.

THE TEST

The goal of this test is to generate a perfect maze using an algorithm of your choice. A perfect maze is defined as having no loops or closed circuits, and no inaccessible areas. In a perfect maze, any two points are connected through a singular, unbroken path. There are multiple algorithms to generate such a maze, as is detailed on this [Wikipedia page](#).

Log the hours you spend on the project in the provided Excel document.

Functional requirements

- I. A perfect maze generator
- II. The game requires UI elements to:
 - a. Change the width of the maze;
 - b. Change the height of the maze;
 - c. (Re)generate the maze;
- III. The maze is to be displayed in its entirety on the screen regardless of its size, with minimum white space surrounding it;
- IV. Your game will be tested on desktop - exporting to mobile is encouraged but not required;
- V. Your code will undergo the most scrutiny during our review, make sure it is well structured and extensively commented;

- VI. You are free to design the appearance of both the maze and interface - a basic/simple design will not be judged negatively, but a good design will leave a good impression;
- VII. Use C#.

Bonus points for a good impression (all optional)

- I. Implement more than one maze generating algorithm and allow the user to change algorithms using the interface;
- II. Implementing animations is encouraged - DTT makes use of the LeanTween animation asset, but you are free to choose your own;
- III. Add a character that is able to navigate through the maze via user input;
- IV. Have a fun idea? Feel free to implement it :)

Limitations

It is not allowed to make use of the Unity Asset Store for anything directly related to the essence of this test. Assets related to design, animations, particle effects, etc. are allowed, but use them sensibly and with clear purpose.

Delivery

When you are satisfied with your game, zip your project (including your hour log) and send a [WeTransfer](#) link to your person of contact at DTT.

Our review

As mentioned earlier, the quality and structure of your code will be the foremost subject of our review. This table stipulates the criteria by which we will review your test; keep these in mind during development.

| Criteria | Maximum score |
|---|---------------|
| Completeness of functional requirements | 10 |
| Quality of code | 10 |
| Structure of code | 10 |
| Unity project set-up/structure | 10 |
| Completeness of hour log | 5 |
| Deadline management | 5 |
| Maximum score | 50 |

Questions?

If you have any question regarding the requirements of the assignment, or if you are stuck on a problem for too long, please don't hesitate to contact us.

More DTT

Feel free to have a look at all our apps at: <https://en.d-tt.nl/app-developer-amsterdam>.

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