

Software Development Agreement

Dijkstra's Algorithm Implementation

March, 26th 2019, the current Software Development Agreement terms and conditions that govern the contractual agreement between the Team group 4 as the Contractor and the Team 5 as Subcontractor.

Booth parts having as principal place of activities at Business Academy Southwest at Spangsbjerg Kirkevej 103, 6700 Esbjerg.

WHEREAS, the Client has conceptualized a solid implementation of Dijkstra's Algorithm as a part of Map application where we want to know the most effective and faster route/way in order to save time to our clients (the "Software"), which is described in further detail on Exhibit A, and the Developer is a contractor with whom the Client has come to an agreement to develop the Software.

NOW, THEREFORE, In consideration of the mutual covenants and promises made by the parties to this Software Development Agreement, the subcontractor and contractor covenant and agree as follow:

Subcontractor's duties

The team 4 as Contractor part hire the services of the team 5 as Subcontractor to develop the Software in accordance with the specifications attached hereto as Exhibit A.

1. The Subcontractor shall complete the development of the Software according to the milestones described on the form attached hereto as Exhibit B. In accordance with such milestones, the final.
2. The Subcontractor will not receive any extra support from the contractor apart of the information exposed at the current document.
3. The contractor could terminate the current agreement in case of the delivered solution does not include the Dijkstra's Algorithm.
4. The subcontractor should provide a small training about the product delivered and explanation about the differents solutions in the market that use the Dijkstra's Algorithm.

Delivery

The Software shall function according the specifications exposed at Exhibit A.

1. The subcontractor should provide a document of the state of software on the delivery date.
2. The contractor should notify a written advice of the acceptance or not acceptance.

Compensation

According the market rates, the contractor part in this case the "Team 4" formed by Rafael Garcia, Miguel Angel Herranz and Edison Lamar should pay 3 stk Tuborg Classic beer to the subcontractor part which is the "Team 5". The full compensation will take place on the basement of EASV according the dates at the Exhibit B.

Intellectual property rights

The contractor and subcontractor acknowledge and agree that EASV (Business Academy SouthWest) will hold the all intellectual property rights in the software delivered.

Changes

Assuming professionalism and honesty on both parties the contractor could request to subcontractor a reasonable change in the specifications and the subcontractor will put effort on it managing without extra cost or delay in the delivery of the solution.

In case that the change can not managed on time the subcontractor should notify to the contractor the estimate of delay time and the extra cost and last instance the contractor agrees or not to continue with the change.

Confidentiality

The Subcontractor has public sources of the Dijkstra's Algorithm and is allowed to use any source but details about software's code, specifications and the final solution should not expose to any third party.

Subcontractor warranties

The Subcontractor represents and warrants to the Contractor the following statements:

1. Under the current agreement the subcontractor ensures that the final solution is not incurring to violate any other agreement with a third party.
2. The Software will not violate the intellectual property rights of any other party.
3. If the solution delivered has not the functions according the specifications, the subcontractor will take care of the necessary fixes and present the reasons of the malfunctions.

Indemnification

The responsibility of any lawsuits and costs of every kind related to the software including the intellectual rights of any third party during the development process.

Applicable Law

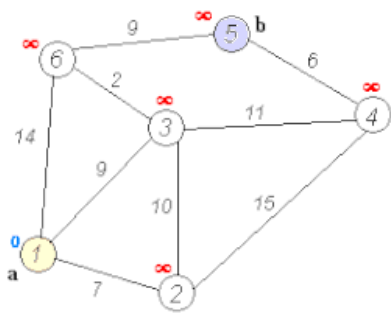
The current Software Development Agreement and the terms included shall be governed over Danish laws and belong to the Esbjerg court jurisdicción. For testimony this is signed in Esbjerg, onof of 2019.

Contractor: _____

Subcontractor: _____

Exhibit A

Software specifications



Dijkstra's algorithm is an algorithm for finding the shortest paths between nodes in a graph, which may represent, for example, road networks. In our case we will use this algorithm to represent all the possible routes between one point and another as Google Maps do (take a look the the image).

This algorithm must be implemented using the latest .NET Framework (v2.2.x) and the programming language C# or VB what you prefer (both Microsoft technologies). We do not need a Front-End only a solid and formed implementation of this Algorithm by console .

Some context:

The algorithm exists in many variants; Dijkstra's original variant found the shortest path between two nodes, but a more common variant fixes a single node as the "source" node and finds shortest paths from the source to all other nodes in the graph, producing a shortest-path tree.

The Dijkstra algorithm uses labels that are positive integer or real numbers, which have the strict weak ordering defined. Interestingly, Dijkstra can be generalized to use labels defined in any way, provided they have the strict partial order defined, and provided the subsequent labels (a subsequent label is produced when traversing an edge) are monotonically non-decreasing. This generalization is called the Generic Dijkstra shortest-path algorithm.

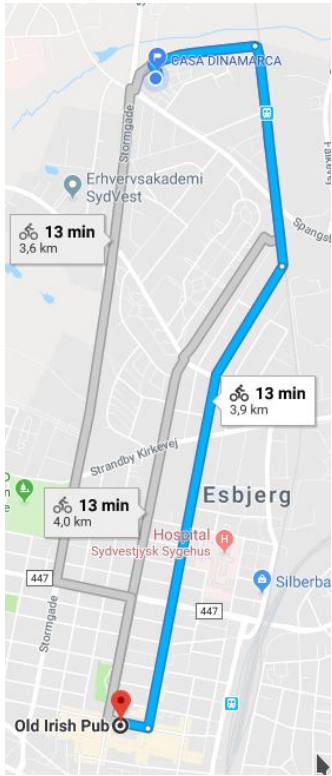


Exhibit B

Milestone schedule

Date	Project milestone
27/03/2019	Take a look the contract and discuss point to point contractor-subcontractor.
02/04/2019	Hand-in the solution to the contractor.
03/04/2019	Review of the software delivered with the contractor.
05/04/2019	Full compensation at the EASV BAR.