The main idea of the software is that it is a tool that will be aimed at novice players as they are the ones who would require such a simple guidance tool.

The users simply need to download it from the Steam Market and run it at the same time as their games. Before using it the player should connect their Steam account to the tool to establish connection and select from a few predefined positions of where on the screen should the tips show up. Therefore, the tool would then need to be installed and run parallel with the game, pushing in these notifications. If authentication is needed a simple email and password is enough.   
  
In terms of the GUI it could be a very simple one basic one, coming with some frontend library as it won’t have any visual elements.

To get data from the actual game it needs an [API connection](https://docs.opendota.com/) with the following key parameters. Some key parameters to identify would be the game of the user, the amount of gold they have, role, lane, already existing items, game time, already purchased items, used hero in order to be able to provide continuous item suggestions to the player. The tool can just provide a simple popup window with the suggested items and item description on the bottom confirming or declining if this suggestion is a good one. Also, a checkbox is needed to disable the suggestions, in case the player finds the tool disturbing.

Also, the model can first be trained with some parsed matches. Match IDs for fetching games are available [here.](https://www.dotabuff.com/matches?game_mode=all_pick)   
The only important thing is that the game has a few modes and we should only support ‘All Pick’ in this first version. We should check if the game mode is all pick. If it is not that mode, a message should be displayed to the user “Currently only All Pick matches are supported”. Therefore, the list should be filtered by Game Mode to get the right matches.

In order to receive feedback from these users, a simple yes-or-no type of reaction would be possible to provide in terms of the usefulness of each and every individual suggestion. As a bonus, this would also help with the further training of the software.

Moreover, at the end of each match, the player would receive the option to fill out a survey of a few questions to evaluate the overall usefulness of the provided solution.

The survey will consist of not more than 5 questions:  
1. Did the tool help you improve your performance?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strongly disagree | Disagree | Netural | Agree | Strongly agree |

2. How relevant were the inputs you received during your game?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Very irrelevant | Irrelevant | Netural | Relevant | Very relevant |

3. What’s your experience with MOBAs (League of Legends, Dota 2, Smite etc.)?

|  |  |  |
| --- | --- | --- |
| Beginner | Intermediate | Veteran |

4. What’s your experience with Dota 2?

|  |  |  |
| --- | --- | --- |
| Beginner | Intermediate | Veteran |

5. Comments, feedback

Short text input  
  
  
The first 4 would then be required.

In order to double check the overall positive or negative ratings of users, the outcome of games could be used as a control variable, so a summary of the win rates would be needed as well.  
  
There is also a Python library that could help with the Steam connection <https://pypi.org/project/steam/>

I have planned to divide the task into 2 parts

1. Frontend GUI part (2nd Phase)
2. Getting the data from API and prediction part. (1st we will complete this)

* To get the data from the API <https://docs.opendota.com/#> about the players we need an authentication key (API\_KEY). So please, provide this key.
* What needs to be predicted ?