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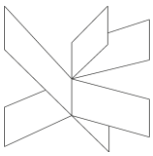

Tastevin

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ICT Engineering

7th Semester

16/09/2018

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1 Background description

Ever since its conception in 6000 BC in Georgia, grape wine has been one of humanity's favorite beverages. Even though in 2015 the estimated world-wide wine consumption amounted to a whopping 24 million liters, wine is much more than just a popular drink. It has spawned a culture of artisan production, careful plantation and upkeep of more than species of grapevine on all continents. Still, wine's cultural impact is even more prevalent in the world of cuisine.

The quality of a wine list can determine the quality of a restaurant and high-class establishments employing experts (sommeliers) sell on average $12 more per purchase, with 6% more customers deciding to choose wine over other refreshments. The job of a sommelier, however, is more than just that of a sales person. They assist in picking out the most suited bottle for a specific item ordered, cellar inventory, providing valuable advice, glassware and sampling techniques for their customers.

In the age of information and perpetual hurry, many people do not have the time to indulge in fine dining or funds to hire a personal sommelier. With the abundance of other available tools in this day and age, where conveniences such as ordering a taxi, having groceries delivered or even finding a date are a mere button press away, a virtual wine selection assistant is more an eventuality rather than an option.

2 Definition of purpose

The purpose of the project is to create an intuitive, socially-interactive mobile application using data mining algorithms for wine selection in fine dining purposes.

3 Problem Formulation

The project focus is to enable laypeople to easily match their food with “hand-picked” wine without requiring the presence of a skilled sommelier on the spot, as well as manage their wine collections and preferences. The application will allow the users to interact socially with professional sommeliers and each other, sharing ratings, reviews and recipe-wine combinations and recommendations. It will further include a variety of minor additional conveniences and minor functionalities.

Questions to be answered are the following:

- How to create a food-to-wine matching engine using data mining algorithms?
- How to enable the users with social interaction?
- How to allow in-app purchases?
- How to help the users lacking wine related knowledge?
- How to make the users able to locate, based on their positions, wine producers in the vicinity?
- *(optional)* How to make a dynamic application with user-friendly GUI?

4 Delimitation

- The project will only have, more or less, 20 wines in the database.
- The project will only have the company in the shop and no other.
- The project will only be able to locate the wine producers that the product-owner will introduce.

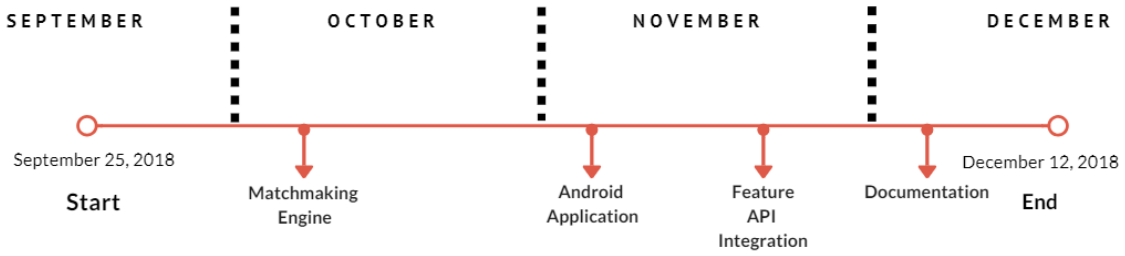
5 Choice of models and methods

WHAT partial problem?	**WHY** study this problem – related to the purpose of the project?	**WHICH** level of the outcome is expected?	**WHICH** methods/ models/ theories will be used?	**WHO** in the group is the main responsible person for this point?	**WHEN** is the estimated workload (hours)?
How to create a food-to-wine matching engine using data mining algorithms?	The ability to match available products with user input (ingredients in recipe used for a particular meal) is the system's selling point and core functionality.	The system will be able to match the wine with several types of food, based on main food groups.	A logic engine, as well as, collection of data and analysis of the user's experience implemented utilizing data mining algorithms.	Janek	72
How to enable the users with social interaction?	Users crave in-app social interaction and base their own purchases on other people's opinions on a given product.	The users will be able to review wines and share their experience on at least one social platform.	Web Services and Social Media integration.	Isabella	12-24
How to allow in-app purchases?	The users need to be able to conveniently order products and provide revenue.	The users will be able to make in-app purchases.	The system will be outfitted with PayPal integration.	Janek	36-48
How to help the users lacking wine related knowledge?	People often know very little about wine, even how to choose the right glass, the right temperature etc.	The users can easily access information and tips on wine related matters.	*Sommelier's Guide* GUI section with helpful information, tutorials and general tips.	Janek	24
How to make the users	People travelling in another country might take interest	The users will be able to locate wine	Google Maps integration.	Isabella	24

able to locate, based on their positions, wine producers in the vicinity?	in local wine producers and distribution points.	producers in their vicinity.			
(optional) How to make a dynamic application with user-friendly GUI?	The users should be able to access the system at any time and to use all available functionalities.	The users will interact with an intuitive interface.	The system will be an Android OS application.	Isabella Janek	48

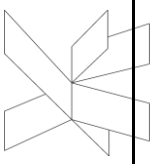
6 Time schedule

The time scope is estimated at 1000 hours and the project will use the Kanban method as a managing tool. The tasks will be divided in: To Do, Planned, In Progress, Completed, Testing, Closed. The In Progress and the Planned will have a limit of two tasks (one for each group member).



7 Risk assessment

Risks	Description	Likelihood Scale: 1-5 5 = high risk	Severity Scale: 1-5 5 = high risk	Risk mitigation e.g. Preventive & Responsive actions	Identifiers	Responsible
Illness	Whether a member of the group falls ill.	3	2	Home working and group members takeover to finish the remaining job.	The person is not able to work or participate to the meetings.	Whoever is not affected by this risk.
The algorithm used for the matchmaking is not working	The food matchmaking with the wine is not working properly and it combine wine with food that don't bind together.	2	5	The algorithm must be changed and a new one has to be designed.	The system binds wine with wrong food.	Janek
Review based recommendation for the suggested wines not working	The system is not able to suggest the best wine based on the user's taste	3	5	There will be a phase of debugging and then, after identifying the problem, the responsible will make the proper changes.	The system suggests the wrong wines to the users.	Isabella
The GPS maps for the wine producers is not working	The system is not able to locate the user through GPS or is not able to show the wine producers in the vicinity	3	4	There will be a phase of debugging. If the problem cannot be	The system shows the wrong wine producers or doesn't show them	Isabella

				solved, the functionality will be replaced with a search location where the user will insert the city and the system will give a list on wine producers in that city.	at all.	

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Appendices

Team Contract

Team members:

- Isabella Reggi (240189)
- Jan Janusz Debowski (240187)

Rules:

- Everyone should help each other, should do his/her best in a group work and should communicative, friendly, confident and POSITIVE.
- If a member cannot be present at activities that require teamwork, he must announce his absence to the rest of the group by phone or internet. If she/he doesn't do that and continues missing classes, can be expelled from a group.
- All members will show interest in the project to avoid unproductive discussions and arguments.
- All members will give their best to perform the tasks until the deadline.
- All members will be present at activities that require teamwork.
- Between group members is recommended a relationship based on equality, collegiality, respect and attention.
- Team members will help each other improving their learning skills and supporting the project development.
- Decisions concerning the project will be taken after consulting all members.
- Group members who do not actively participate in the work group, and seriously affect the project development will explain to the rest of the group the motivation of their non-participation and the rest of the group will find a solution to support him as far as the person concerned is interested.
- Group working hours 30/40 per week. Option to extend if everyone agrees.
- Option to leave if the group member agrees to complete his work alone and have it ready the next day.