

Sprint Evaluation

What is the progress of your project in this sprint? What goals are achieved? What problems are overcome? If you are updating your plans what are your justifications?

As our tentative time plan placed in the StartUp document represents, we have dealt with several tasks during this sprint, namely, practical market search, design assessment, system constraints, tasks related to GUI module implementation and User Friendly Data Structures.

Firstly, the practical market search task started in the first sprint and carried on to this sprint as well, to look for more sources to benefit from, unfortunately not many projects, focused directly on Digital Geometry Processing, especially in the scope of Blender, were encountered during the search but some were kept aside for their design, minor functionalities and implementation of algorithms outside the Blender in order to motivate us during the further implementation. As to state, this task has been completed.

Related to the assessment of design assessment task stated in our time plan, we have figured out that viewing it as a separate task from the ongoing process would not be totally correct. We have been discussing over the functionalities needed in our GUI and Editor modules and so far although the overall structure of the modules seem to stay still, the sub-structures of the modules and their scopes continue to change as we get more and more involved with the development. Therefore, this task has been ongoing throughout the whole sprint and will continue to do so and our aim is to shape it more solidly as much as we can, especially before the requirement and design documents.

About the system constraints roughly,

- We inherit from Blender's primitive data types.
- Regarding 3rd party libraries in Python-side, the discussions about a few external Python libs are ongoing like matplotlib.
- Regarding 3rd party libraries in C/CPP-side, we do not rely upon any other 3rd party library except the ones Blender relies on.
- About UFDS, memory update conventions are decided.
- We will support more than one mesh operations.
- Our end user has no access to Blender's own API, but our API. Our API has internal access to Blender.

As it has been explained in the design assessment task, we have been trying to decide the constraints, functionalities of the GUI and Editor modules during this sprint a lot, depending on our main objective and target audience. The Editor module implementation normally stands in the next Sprint, but we have made some practicing on it as well, as it resides in GUI of Blender.

After some more practicing with mini scripts as we have tried to do in Sprint 1 too, we have begun to implement GUI module, by constantly revising the Blender-Python API and also the source code of Blender, (as we have decided to base our GUI on it). This task will continue for the next Sprint as well.

We have also discovered some functionalities that Blender lacks/does not properly operate and our tool surely needs, specifically regarding Text Editor module. We have been trying to find solutions for them, but we have not find all of them steady solutions so far, since their implementations are not in the abstraction level we are working in (our research through Sprint 2 revealed this), so we will go on doing so, as to improve our modules and therefore, user experience.

Lastly, about the User Friendly Data Structures, with the cooperation of our supervisor, new API are introduced. The implementation of this module is already extended to Sprint 3, so implementation will continue.

Team

How well your is team working together? How many meetings did you hold? Are you planning any changes in your cooperation strategy? Which work is completed by which member (in a Gannt chart)?

We have held a group meeting once a week, except the one with the Scrum master, in order to decide how to go forward in our process, which tasks to be completed during that week and which group member(s) should be responsible for them. We have been having relatively long meetings this Sprint, as we needed to decide on the implementation of the GUI and Text Editor module. So far, we could benefit from this cooperation strategy, so for now pursuing this one seems alright. Though, we could not hold as much meetings as we wanted with our supervisor, due to his absence, we will try to keep up with him in the next Sprint for sure.

Here is our distribution of tasks during Sprint 2:

(We have tried to stay committed to the distribution to the members in the StartUp document, but there have been slight changes to keep our work more effective)

Task	Assigned Member	1 st Week	2 nd Week	3 rd week
T3	Dicle	x		x
T4	All members	x	x	x
T5	Furkan, Dicle, Emre		x	x
T6	Furkan, Dicle, Uğur		x	x
T7	Furkan, Emre		x	x

Backlog Updates

What are your backlog updates?

We have mostly achieved what we planned for Sprint 2, though there appears to be more and more problems/challenges we have never expected of, therefore we needed to spend more of our time to understand them rather than go much further with the implementation. But on the other hand, we could look into the task of the next Sprint, Editor module, to find out what is ahead. For the next sprint, we plan to find solutions for them and have our modules promised for this semester to work as planned and properly for our target audience.

Also we should mention that we tried to gain more experience with using the OpenProject and GitLab platforms during this Sprint, we tried to use them in order to show our weekly and overall progresses, which can actually be tracked, but it seems like we had some detail issues with the updates of the tasks, such as not doing them right on time, not being sure how to assign for each other etc. Though, it is sure to say that we would be more conscious users for the next Sprint.