Project Charter

| Project Sponsor | Donon Y. |
| --- | --- |
| Project Manager | Rodin I. |
| Author | Rodin I. |
| Classification | Not classified |
| Status | Pending |
|  |  |

List of Changes

| Date | Version | Changes | Author |
| --- | --- | --- | --- |
| 1.3.2019  what date format should we use(dd.mm or mm.dd?) | 1.1 | Document init | Rodin I. |
| 6.3.2019 | 1.2 | Change the role in the table Risk and Reff. in Organization | Zdornov M. |
| 25.3.2019 | 1.3 | Description of solution added | Rodin I. |

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# Background

Reference to study and option chosen.?

# Objectives

**System Goals**

| No | Category | Description | Measure | Priority |
| --- | --- | --- | --- | --- |
|  | Lines stage | Program should be able to draw all the lines from obj files with different accessible methods | Working module of lines drawing | M |
|  | Polygons stage | Program should be able to fill every triangle of the model with certain color | Working module of edges filling | M |
|  | Lighting stage | Program should be able to simulate light from lightsource from different angles | Working lighting module | 3 |
|  | Texture stage | Program should be able to fetch textures from file and put them to polygons | Working texture module | 2 |
|  | Camera stage | Program should be able to freely convert coordinates to allow to set different camera angles | Working camera module | 2 |

Explanation: Priority: M=must /1=high, 2=medium, 3=low

**Procedural Goals**

| No. | Category | Description | Measure | Priority |
| --- | --- | --- | --- | --- |
| *1* | *Code readability and maintainability* | *Code should be understandable by all members of developing team* | *Comments for codes, usage of VCS and understandable commits discriptions* | *M* |
|  |  |  |  |  |

**Parameters**

Text

**Delimitation**

Text

# Description of Solution

Description of option chosen, reference to study.

We decided to use parser – drawer – linker approach. So we have a parses that reads all required information from file and represent it in specific format for further usage. We have a linker module that represents an entry point of whole project and links parser and drawing modules between each other? And we have a drawer module that represents given information in visible form directly on canvas. Among all possible options we decided to use python, pillow, python.graphics and numpy. Study can be found in work order.

# Strategy Reference and Implementation of Requirements

Reference to strategy

* All project goals are totally agree with core organization strategy

Implementation of requirements:

* All the requirements are clear and some of them are already implemented in prototype. For example texture module, parser, lightning module. All the reauirements was interpreted in understandable way, we have template of system architecture and our prototype is build upon it.

# Legal Framework

We`ve tried two or three different libraries providing same functionality and we`ve decided to stop on the Pillow library for graphic purposes for python, but also we use some suitable object types from python Graphics library in order to not to duplicate code, not to write a code worse then we can use and not to waste time on it. We also use built-in Python IO module, NumPy library to perform all the needed calculations and some specific functions from Math module. (Whats the difference between options and frameworks?)

# Resources Required

Costs (Rub)

| Phase | Planned |
| --- | --- |
| Initiation\* | - |
| Concept | - |
| Implementation | - |
| Launch | - |
| Total | - |

\*Advance (Actual)

Human Resources Required

| Phase | Planned |
| --- | --- |
| Initiation\* | (5 humams)40 hh |
| Concept | (5 humams)50 hh |
| Implementation | (5 humams)140 hh |
| Launch | (5 humams)50 hh |
| Total | (5 humams)280 hh |

\*Advance (Actual)

**Other Resources**

Rooms, IT infrastructure, specific software, etc.

# Efficiency

It will cost us approximately 56 hours for each team member, and the benefit will be positive course grades both for management and computer graphics

# Planning

Milestones and deadlines

| Milestone | Planned |
| --- | --- |
| *project release* | *20.4.2019* |
| Project presentation to project sponsor | *2.3.2019* |
| Decision on project release | 30.3.2019 |
| Prototype presentation | 12.04.2019 |

# Organization

| Role in the Project Organization | Name | Ref. | Function/Organizational Unit |
| --- | --- | --- | --- |
| *Project Sponsor* | *Donon Yann* |  | *Head of money Department* |
| *Steering committee* | Pashina Tatiana | Connect with PS |  |
| *Project Manager* | Rodin Ilya | Connect with PS |  |
| *ISDP manager* | Posokha Kirill |  |  |
| *Specialist: User representative* | Zdornov Maxim |  |  |
| *Specialist: Business process owner* | Posokha Kirill | Connect with PS |  |
| Quality and Risk Manager | Pashina Tatiana | Connect with PS |  |
| Sub-Project Manager | Rodin Ilya |  |  |
| Project Support | Rodin Ilya |  |  |
| Member of Technical Advisory Committee | Zdornov Maxim |  |  |
| Product Owner | Posokha Kirill | Connect with PS |  |
| Operations Manager | Pashina Tatiana |  |  |
| Business Analyst | Gordeev Pavel | Connect with PS |  |
| Developer | Gordeev Pavel |  |  |
| IT Architect | Posokha Kirill |  |  |
| Test Manager | Zdornov Maxim |  |  |
| Tester | Zdornov Maxim |  |  |

# Risks

| No. | Risk Description | PO | LI | RN | Measures | To be Handled by | Deadline |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *R1* | *IT system does not perform well enough* | *2* | *3* | *6* | *Performance Tests* | Test Manager | 20.04.2019 |
| R2 | Product is not finished | 3 | 3 | 9 | Compliance with deadlines | PM | 20.04.2019 |
| R3 | Project does not response to all the requirements | 2 | 2 |  | Compliance with requirements list | Product owner | 20.04.2019 |
| R4 | Necessery documentation is not ready | 2 | 2 |  | Percentage of filled documents relative to hermes prescriptions | PM | 20.04.2019 |

Explanation: PO=probability of occurrence: 1 low / 2 medium / 3 high; LI=level of impact 1 low / 2 medium / 3 high, RN=risk number

# Consequences

**If project is released**

We`ll get positive course grades both for management and computer graphics

**If project is not released or if it is released at a later date**

We`ll have troubles with both courses and won`t have enough time to get prepared for our diploma defence