

Discrete 3D surfaces of revolution

English Presentation

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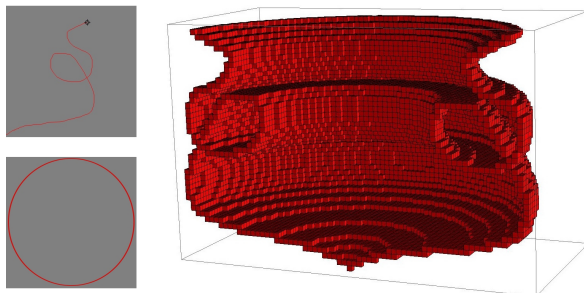
December 9th of 2015

- 1 Introduction
- 2 Staff Organization
- 3 Planification
- 4 Risks
- 5 Methodology
- 6 Costs
- 7 Conclusion

- 1 Introduction
 - Collaborators and clients
 - Context
- 2 Staff Organization
- 3 Planification
- 4 Risks
- 5 Methodology
- 6 Costs
- 7 Conclusion

- Clients :
 - Éric ANDRES (Professor and former director of XLIM-SIC department)
 - Gaëlle LARGETEAU-SKAPIN (University lecturer, Discrete geometry)
- Exemple of final user :
 - Aurélie MOURIER (Artist)
- Pedagogic Supervisor :
 - Philippe MESEURE (Professor, Computer Graphics)

- Éric ANDRES and Gaëlle LARGETEAU-SKAPIN developed a new algorithm to model discrete surfaces of revolution.
- Display the result with Mathematica



- Need of a tool useable by everyone and everywhere

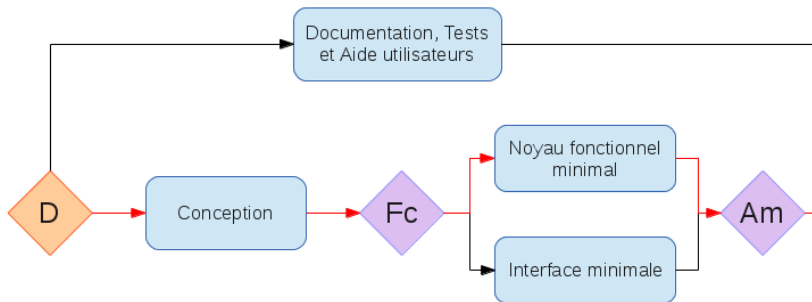
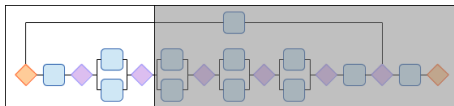
- 1 Introduction
- 2 Staff Organization
 - Roles
 - Meetings
- 3 Planification
- 4 Risks
- 5 Methodology
- 6 Costs
- 7 Conclusion

- Team composition :
 - Thomas BENOIST - Project manager
 - Zied BEN OTHMANE - Quality manager
 - Adrien BISUTTI - Risks manager
 - Lydie RICHAUME - Tasks manager

- Milestone meetings :
 - With the clients
 - First meeting : around December 20th, 2015
 - Possibility to add meetings during the project
- Audits
 - In presence of the auditor, the clients and the pedagogic supervisor
 - Followup meeting, Progress meeting, Delivery, Presentation
- Meeting with the pedagogic supervisor every week

- 1 Introduction
- 2 Staff Organization
- 3 Planification
 - Tasks
 - Pert diagram
 - Gantt diagram
 - Progress
 - Deliverables
- 4 Risks
- 5 Methodology
- 6 Costs
- 7 Conclusion

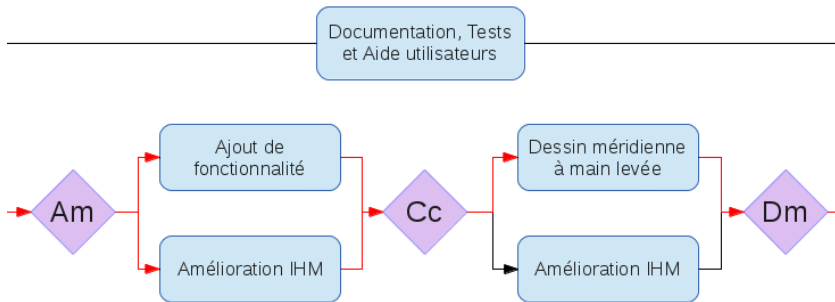
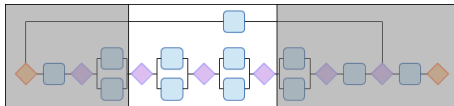
1 - Documentation, test and users help	
2 - Design	
3 - Kernel functional	4 - Minimal interface
6 - Fonctionnalies adding	5, 7, 10 - IHM enhancement
8 - Free hand curve	
9 - Data management	
11 - User's curve	
12 - Technical report	



D : Start (30/10)

Am : Minimal appli. (24/12)

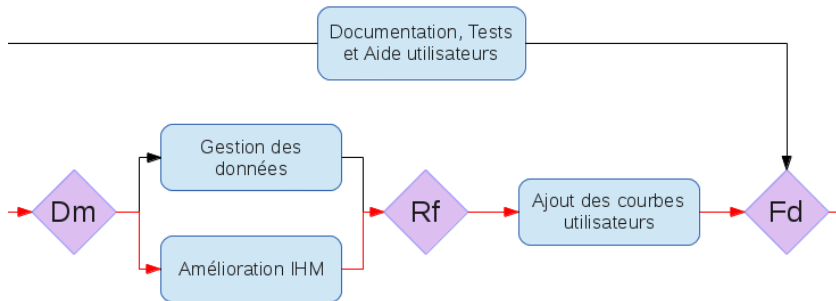
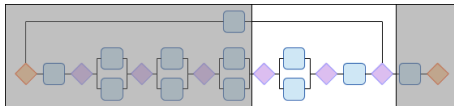
Fc : End of design (16/12)



Am : Minimal appli(24/12)

Dm : Hand free drawing (28/01)

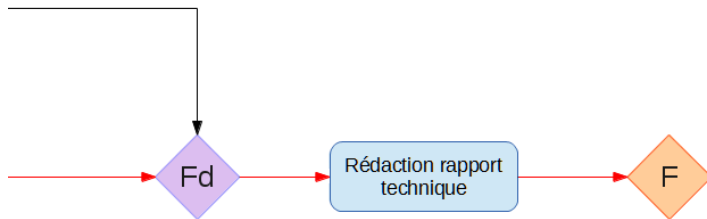
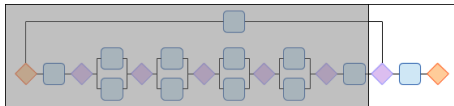
Cc : Courb choice(20/01)



Dm : Hand free drawing (28/01)

Fd : End of Development (02/03)

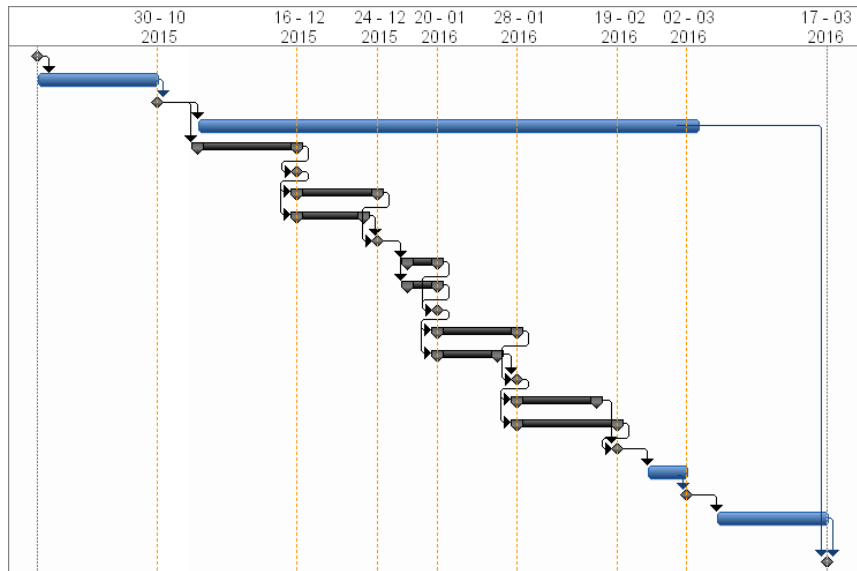
Rf : Write formula (19/02)



Fd : End of Development (02/03)

F : Fin (17/03)

Gantt



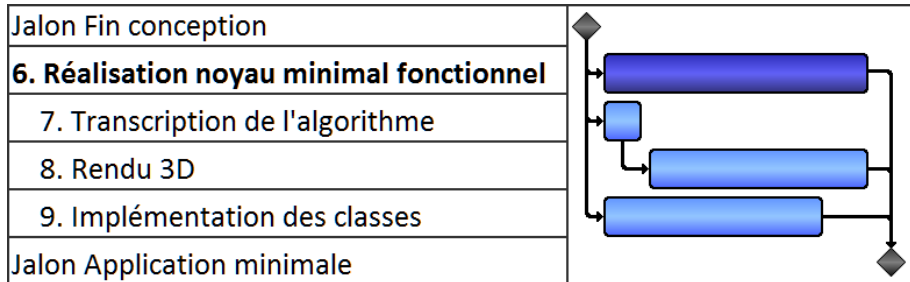
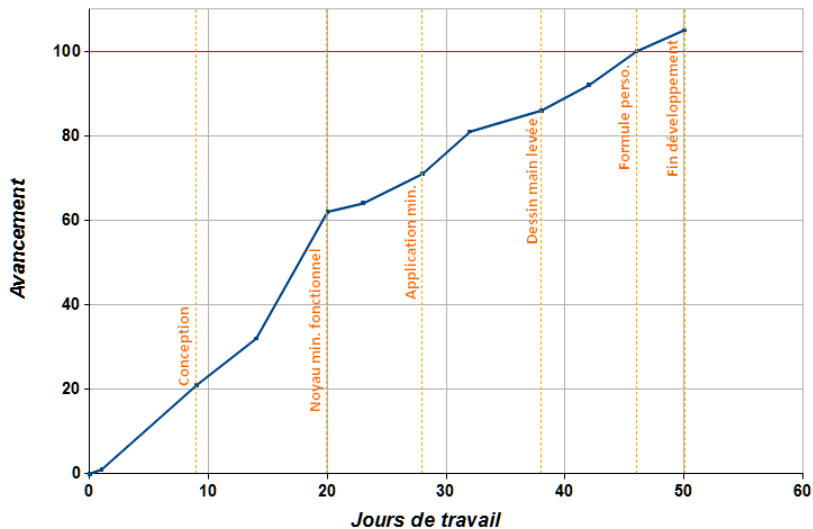


Diagramme d'avancement des tâches



N°	Deliverable	Planned date
1	Interface and algorithm result	12/23
2	Minimal application	01/21
3	Free hand drawing and curves with editable parameters	01/29
4	Equations and export	02/19
5	Final application and documentation	03/02

Deliverables types :

- Software version : all
- User documentation : all
- Technical documentation : 1 and 5

- 1 Introduction
- 2 Staff Organization
- 3 Planification
- 4 Risks
 - Specifics risks
 - Generic risks
- 5 Methodology
- 6 Costs
- 7 Conclusion

List of identified risks :

- Generation algorithm evolution (criticality : 2)
- Difficulty to transcript the algorithm (Mathematica → Javascript) (1)
- Interface will be developed for two types of users (1)
- 3D Rendering using too much resources (1)
- Server linked problems (0)

Specifics risks

- Generation algorithm evolution

Evaluation de la criticité (cf. guide D080-QG1)				
Gravité	0	1	2	3
Délai		●		
Coûts	●			
Recettes	●			
Perf. Tech.	●			
Autre...				
Globale		●		

Gravité	3	2	1	0
3				
2				
1				
0				
	0	1	2	3

Probabilité

Criticité du risque	
0	RISQUE
1	NON CRITIQUE
2	RISQUE
3	CRITIQUE

Specifics risks

- Interface will be developed for two types of users

Evaluation de la criticité (cf. guide D080-QG1)				
Gravité	0	1	2	3
Délai	●			
Coûts	●			
Recettes	●			
Perf. Tech.	●			
Autre...			●	
Globale			●	

Gravité	3				
	2		●		
	1				
	0				
		0	1	2	3
		Probabilité			

Criticité du risque	
0	RISQUE NON CRITIQUE
1	
2	RISQUE CRITIQUE
3	

Specifics risks

- Server linked problems

Evaluation de la criticité (cf. guide D080-QG1)				
Gravité	0	1	2	3
Délai	●			
Coûts	●			
Recettes	●			
Perf. Tech.	●			
Autre...				
Globale	●			

Gravité	0	1	2	3
3				
2				
1				
0	●			
	0	1	2	3
	Probabilité			

Criticité du risque	
0	RISQUE
1	NON CRITIQUE
2	RISQUE
3	CRITIQUE

- New clients (criticality : 1)
- Non-compliance of the requirements (1)
- Non usability of tools (1)
- Insufficient intern communication (1)

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 - Application
 - Tests
 - Quality insurance plan
- 6 Costs
- 7 Conclusion

- Spiral development
 - Deliverable for every developments cycles (Software version and documentation associated)
 - Documentation and tests during every developments cycles
 - Adaptation to the client requests
 - Six developments cycles
- Quality insurance plan
 - QIP : ISO-9126 standard
 - Given a quality note according to different criteria
 - internal and external tests

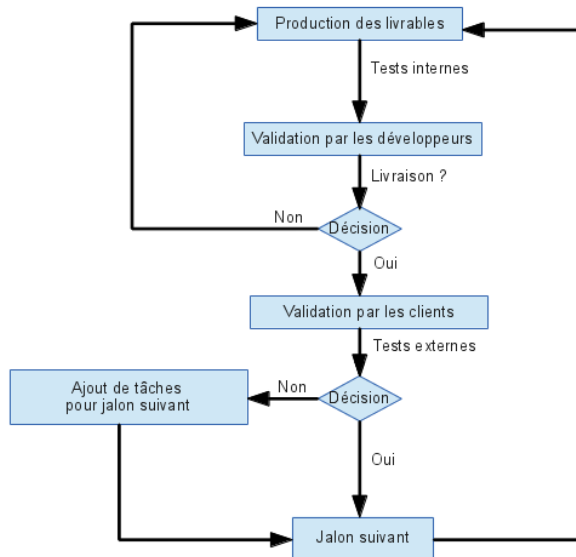
Internal tests

- Quality code mesurment
- Tests plan defined by the quality manager
- Unit tests conducted by the developers
- Integration tests conducted by the quality manager

External tests

- Validation of the application by the clients and the quality manager
 - Functionalities validation
 - Interface validation
- Quiz scripts given to the clients

Quality insurance plan



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- Project cost :
 - Junior engineer : 3 000 € / month
 - 4 persons during 10 weeks
 - Cost price : 30 000 €
 - Selling price proposed : 40 000 €
- Distribution of payments :
 - 30% when the requirements are signed (12 000 €)
 - 10% for every deliverables (4 000 €)
 - 30% for the final delivery

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- Cycles organization → incremental development
- Validation with the clients
- Only one critical risk
- Next milestone : Design phase

Discrete surfaces of revolution

English presentation

Thanks for your attention.

Are there any questions ?