Contents

1	\mathbf{Intr}	oduction	1					
	1.1	Stakeholders	. 1					
	1.2	Customer	. 1					
	1.3	Project Scope	. 1					
2	Project Directive							
	2.1	Methodology	. 2					
	2.2	Group Organization	. 2					
	2.3	Project Phases						
		2.3.1 Planning and research						
		2.3.2 Sprints						
		2.3.3 Documentation and delivery						
	2.4	Risk Management						
	2.5	Quality Assurance						
3	Pre	liminary Studies	3					
	3.1	Methodology						
		3.1.1 Development process						
		3.1.2 Conclusions						
	3.2	Game Concept						
		3.2.1 Power industry						
		3.2.2 Similar game concepts						
		3.2.3 Conclusions						
	3.3	Mobile technology						
	0.0	3.3.1 Mobile platform						
		3.3.2 Crossplatform						
		3.3.3 Native						
		3.3.4 Conclusions						
	3.4	Mobile development						
	5.4	3.4.1 Native languages						
		3.4.2 JavaScript, HTML5, and CSS3						
		3.4.3 Frameworks						
	0.5	3.4.4 Conclusions						
	3.5	Test						
		3.5.1 Testing cycle						
		3.5.2 Testing activities						
		3.5.3 Testing frameworks						
		3.5.4 Conclusions	3					

4.1 Userstories 4 4.2 Use case diagrams 4 4.3 Functional requirements 4 4.4 Non-functional requirements 4 5 Game architecture 5 6 Test 6 7 Sprint 1 7 7.1 Sprint planning 7 7.2 Requirements 7 7.3 Implementation 7 7.4 Testing 7 7.5 Delivery 7 7.5.2 Actual delivery 7 7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.5 Delivery </th <th>4</th> <th>Req</th> <th>quirement specification</th> <th>4</th>	4	Req	quirement specification	4				
4.3 Functional requirements 4 4.4 Non-functional requirements 4 5 Game architecture 5 6 Test 6 7 Sprint 1 7 7.1 Sprint planning 7 7.2 Requirements 7 7.3 Implementation 7 7.4 Testing 7 7.5 Delivery 7 7.5.1 Planned delivery 7 7.5.2 Actual delivery 7 7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5.1 Planned del		4.1	Userstories	4				
4.3 Functional requirements 4 4.4 Non-functional requirements 4 5 Game architecture 5 6 Test 6 7 Sprint 1 7 7.1 Sprint planning 7 7.2 Requirements 7 7.3 Implementation 7 7.4 Testing 7 7.5 Delivery 7 7.5.1 Planned delivery 7 7.5.2 Actual delivery 7 7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5.1 Planned del		4.2	Use case diagrams	4				
4.4 Non-functional requirements 4 5 Game architecture 5 6 Test 6 7 Sprint 1 7 7.1 Sprint planning 7 7.2 Requirements 7 7.3 Implementation 7 7.4 Testing 7 7.5 Delivery 7 7.5.1 Planned delivery 7 7.5.2 Actual delivery 7 7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery		4.3		4				
6 Test 6 7 Sprint 1 7 7.1 Sprint planning 7 7.2 Requirements 7 7.3 Implementation 7 7.4 Testing 7 7.5 Delivery 7 7.5.1 Planned delivery 7 7.5.2 Actual delivery 7 7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.5.2 Actual delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery		4.4	•	4				
7 Sprint 1 7 7.1 Sprint planning 7 7.2 Requirements 7 7.3 Implementation 7 7.4 Testing 7 7.5 Delivery 7 7.5.1 Planned delivery 7 7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9	5	Gar	ne architecture	5				
7.1 Sprint planning 7 7.2 Requirements 7 7.3 Implementation 7 7.4 Testing 7 7.5 Delivery 7 7.5 Delivery 7 7.5.1 Planned delivery 7 7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.5.2 Actual delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 1 Sprint planning 9 9.1 Sprint planning 9 9.2 Requirements 9	6	Test	t	6				
7.2 Requirements 7 7.3 Implementation 7 7.4 Testing 7 7.5 Delivery 7 7.5.1 Planned delivery 7 7.5.2 Actual delivery 7 7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint planning 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9	7	Spri	int 1	7				
7.2 Requirements 7 7.3 Implementation 7 7.4 Testing 7 7.5 Delivery 7 7.5.1 Planned delivery 7 7.5.2 Actual delivery 7 7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.5.2 Actual delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint planning 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9		7.1	Sprint planning	7				
7.3 Implementation 7 7.4 Testing 7 7.5 Delivery 7 7.5.1 Planned delivery 7 7.5.2 Actual delivery 7 7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint planning 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5.1 Planned delivery 9		7.2		7				
7.4 Testing 7 7.5 Delivery 7 7.5.1 Planned delivery 7 7.5.2 Actual delivery 7 7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9		7.3	•	7				
7.5 Delivery 7 7.5.1 Planned delivery 7 7.5.2 Actual delivery 7 7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5.1 Planned delivery 8 8.5.2 Actual delivery 8 8.5.1 Planned delivery 8 8.5.2 Actual delivery 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9		7.4	•	7				
7.5.1 Planned delivery 7 7.5.2 Actual delivery 7 7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5.1 Planned delivery 8 8.5.2 Actual delivery 8 8.5.1 Planned delivery 8 8.5.2 Actual delivery 8 8.5.1 Planned delivery 8 8.5.2 Actual delivery 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback		7.5		7				
7.5.2 Actual delivery 7 7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9				7				
7.6 Customer feedback 7 7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9			· ·	7				
7.7 Sprint retrospective 7 7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9		7.6	U	7				
7.8 Evaluation 7 8 Sprint 2 8 8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9		7.7		7				
8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.5.2 Actual delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9		7.8		7				
8.1 Sprint planning 8 8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.5.2 Actual delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9	8	Spri	int 2	8				
8.2 Requirements 8 8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.5.2 Actual delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9		_						
8.3 Implementation 8 8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.5.2 Actual delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9								
8.4 Testing 8 8.5 Delivery 8 8.5.1 Planned delivery 8 8.5.2 Actual delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 9 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9			_					
8.5 Delivery 8 8.5.1 Planned delivery 8 8.5.2 Actual delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9			-					
8.5.1 Planned delivery 8 8.5.2 Actual delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9			9					
8.5.2 Actual delivery 8 8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9			·					
8.6 Customer feedback 8 8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9								
8.7 Sprint retrospective 8 8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9		8.6	· ·					
8.8 Evaluation 8 9 Sprint 3 9 9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9		8.7						
9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9								
9.1 Sprint planning 9 9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9	9	Sprint 3						
9.2 Requirements 9 9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9		-		9				
9.3 Implementation 9 9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9								
9.4 Testing 9 9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9			1					
9.5 Delivery 9 9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9			•					
9.5.1 Planned delivery 9 9.5.2 Actual delivery 9 9.6 Customer feedback 9			0					
9.5.2 Actual delivery 9 9.6 Customer feedback 9		0.0						
9.6 Customer feedback			e e e e e e e e e e e e e e e e e e e					
		9.6						
3.1 Spilli lenospective		9.7	Sprint retrospective	9				

	9.8	Evaluation	9
10	Spri	int 4	10
	10.1	Sprint planning	10
		Requirements	10
	10.3	Implementation	10
	10.4	Testing	10
	10.5	Delivery	10
		10.5.1 Planned delivery	10
		10.5.2 Actual delivery	10
	10.6	Customer feedback	10
		Sprint retrospective	10
		Evaluation	10
11	Tem	aplates and standards	11
	11.1	Templates	11
		Standards	

1 Introduction

- 1.1 Stakeholders
- 1.2 Customer

 ${\bf Customer}$

1.3 Project Scope

- 2 Project Directive
- 2.1 Methodology
- 2.2 Group Organization
- 2.3 Project Phases
- 2.3.1 Planning and research
- **2.3.2** Sprints
- 2.3.3 Documentation and delivery
- 2.4 Risk Management
- 2.5 Quality Assurance

3 Preliminary Studies

- 3.1 Methodology
- 3.1.1 Development process
- 3.1.2 Conclusions
- 3.2 Game Concept
- 3.2.1 Power industry
- 3.2.2 Similar game concepts
- 3.2.3 Conclusions
- 3.3 Mobile technology
- 3.3.1 Mobile platform
- 3.3.2 Crossplatform
- **3.3.3** Native
- 3.3.4 Conclusions
- 3.4 Mobile development
- 3.4.1 Native languages
- 3.4.2 JavaScript, HTML5, and CSS3
- 3.4.3 Frameworks
- 3.4.4 Conclusions
- 3.5 Test
- 3.5.1 Testing cycle
- 3.5.2 Testing activities
- 3.5.3 Testing frameworks
- 3.5.4 Conclusions

- 4 Requirement specification
- 4.1 Userstories
- 4.2 Use case diagrams
- 4.3 Functional requirements
- 4.4 Non-functional requirements

5 Game architecture

6 Test

- 7 Sprint 1
- 7.1 Sprint planning
- 7.2 Requirements
- 7.3 Implementation
- 7.4 Testing
- 7.5 Delivery
- 7.5.1 Planned delivery
- 7.5.2 Actual delivery
- 7.6 Customer feedback
- 7.7 Sprint retrospective
- 7.8 Evaluation

- 8 Sprint 2
- 8.1 Sprint planning
- 8.2 Requirements
- 8.3 Implementation
- 8.4 Testing
- 8.5 Delivery
- 8.5.1 Planned delivery
- 8.5.2 Actual delivery
- 8.6 Customer feedback
- 8.7 Sprint retrospective
- 8.8 Evaluation

- 9 Sprint 3
- 9.1 Sprint planning
- 9.2 Requirements
- 9.3 Implementation
- 9.4 Testing
- 9.5 Delivery
- 9.5.1 Planned delivery
- 9.5.2 Actual delivery
- 9.6 Customer feedback
- 9.7 Sprint retrospective
- 9.8 Evaluation

- 10 Sprint 4
- 10.1 Sprint planning
- 10.2 Requirements
- 10.3 Implementation
- 10.4 Testing
- 10.5 Delivery
- 10.5.1 Planned delivery
- 10.5.2 Actual delivery
- 10.6 Customer feedback
- 10.7 Sprint retrospective
- 10.8 Evaluation

- 11 Templates and standards
- 11.1 Templates
- 11.2 Standards