

Index

Chapter: 1	Introduction	
1.1	Overview	1
1.2	Problem Summary	1
1.3	Objectives	1
1.4	Literature Review	2
1.4.1	Cloud Computing	2
1.4.2	Introduction to OpenStack	3
1.4.3	Introduction to J2EE	4
1.4.4	Introduction to MySQL	5
1.4.5	Apache Commons	5
1.4.6	AWS (Amazon Web Services)	6
1.5	Project Planning and Management	6
1.5.1	Project Scheduling	6
1.5.2	Milestones and Deliverables	10
1.5.3	Risk Management	11
1.5.4	Estimation	13
1.6	Prior Art	14
Chapter: 2	Design	16
2.1	Hardware Requirements	16
2.2	Software Requirements	16
2.3	Non-functional Requirements	17
2.4	System Modeling and Design	18
2.4.1	System Architecture	18
2.4.2	Activity Diagram for Private Cloud	19
2.4.3	Activity Diagram for Public Cloud	20
2.4.4	OpenStack Sequence Diagram	21
2.4.5	OpenStack Architecture	22
2.4.6	Client app working architecture	24
2.4.7	Subversion in master repository	25
2.4.8	Synchronizing system	26
2.4.9	Use case for private cloud	28
2.4.10	Use case for public cloud	29
2.5	Canvas Exercise	30

	2.5.1	Observation Matrix	30
	2.5.2	Ideation canvas	32
	2.5.3	Idea Funnel Canvas	34
Chapter: 3		Implementation	36
	3.1	Data Dictionary	36
	3.2	Screenshots	38
	3.3	System testing	48
	3.3.1	Test cases	48
	3.3.2	Testing (White Box Testing)	49
	3.3.3	Specification Testing (Black Box Testing)	49
	3.3.4	Testing methods	49
Chapter: 4		Conclusion	51
	4.1	Limitations	51
	4.2	Future Enhancement	51
	4.3	Conclusion	51
		References	52
		Appendix	