No.	Product Deliverables	Task	Phạm Huy Hoàng	Nguyễn Thanh Bình	Nguyễn Quốc Huy	Đỗ Minh Đạt	Unit	Size
1	Report1 - Introduction	Project Information	O					
		Introduction			O			
		Current Roll Call System		O				
		Proposed Solution	O					
		Functional Requirement	O					
		Roles and Responsibility	O					
2	Report2- Software Project Management Plan	Problem Definition			O			
		Project organization	O					
		Project management plan	O					
		Coding Convention		O				
3	Report 3- Software Requirement Specification	User Requirement Specification	O					
		System Requirement Specification						
		External Interface Requirements			O			
		Functional Requirement						
		Instructor Requirement			O			
		Admin Requirement	O					
		Staff Requirement			O			
		System Requirement	O					
		Student Requirement			O			
		Guest Requirement	O					
		Non-functional Requirement						
		Reliability			O			
		Availability		O				
		Sercurity			O			
		Performance	O					
		Conceptual Diagram	O					

		Data Dictionary	O				
		Design Overview	O				
		System Architectural Design	O				
		Component Diagram	O				
		Class diagram	O				
		Class specification (states, behaviors)					
		RollCall		O			
		Subject		O			
		SubjectType		O			
		Major		O			
		Class		O			
		StudySession		O			
		Instructor		O			
		Semester		O			
		Student		O			
		Staff		O			
		User		O			
		Role		O			
		StudentImage		O			
		StudentAttendance		O			
		AttendanceLog		O			
		LogType		O			
		LogImage		O			
		Request		O			
		RequestImage		O			
		Detailed Description of Components					
	Report 4- Software Design Description	Sequence Diagram					
		Add Image for Single Student	O				
		Add Image for Manu Students	O				
		Delete Student Image	O				
		Create Account	O				
		Configure System	O				
		Face Detection	O				

Task						
Face Recognition	O					
Auto Free Storage Space	O					
Auto Active Roll Call	O					
Add Roll Call	O					
Edit Roll Call	O					
Take Attendance Auto		O				
Take Attendance Manual		O				
Take Attendance Offline & Sync Data		O				
View Roll Call Detail		O				
Report Roll Call by Class		O				
Check Present Rate		O				
Import Student List			O			
Export Report			O			
Add Student			O			
Add Class			O			
Edit Class			O			
Add Subject			O			
Edit Subject			O			
Database Design						
Entity Relationship Diagram	O					
Data Dictionary			O			
Algorithms						
Face Detection	O					
Face Recognition	O					
Setup Environtment						
Attendance Checking (Web)						
Check Attendance Auto (Web)	O					3
Check Attendance Manual (Web)	O					3
View Roll Call Detail (Web)	O					2
Attendance Checking (Mobile)						
Login		O				1
Show Current Roll Call		O	O			2
Check Attendance Auto	O	O				4

#	Report	Feature						
		Check Attendance Manual	O	O				3
		View Roll Call Detail		O	O			2
		Show Current Roll Call (Offline)	O	O				2
		Check Attendance Offline + Sync Data	O	O				4
		Roll Call Management						
		Add Roll Call			O			3
		Edit Roll Call			O			2
		Study Session Management						
		Add Study Session			O			1
		Change Session Time	O		O			2
		Change Session Instructor			O			2
		Face Detection & Recognition						
		Face Detection	O					4
		Face Recognition	O					4
		Add Image for Single Student	O					1
		Add Image using Log Images	O					3
		Web Serivce						
		Login Service			O			1
		Roll Call Info Service		O	O			3
		Check Attendance Auto Service	O	O				3
		Check Attendance Manual Service	O	O				3
		Attendance Report						
		Roll Call List Report	O		O			3
		Student List for Final Exam			O			3
		Single Student in Semester Report			O			3
5	Report 5 - Software Implementation and Test Document	**Check own Attendance Rate**						
		View Attendance of Learned Course		O				2
		View Attendance of Learning Course		O				2
		Teaching Calendar						
		Show Teaching Calendar	O					3
		Sync with Google Calendar	O					4
		Request Management						
		Create Request			O			1

	C1	C2	C3	C4		
Upload Request	O		O			2
Accept Request			O			1
Deny Request			O			1
Account Management						
Manage Account	O					1
Login/Logout	O					1
Change Password	O					1
Student Management			O			2
Instructor Management			O			2
Class Management			O			1
Subject Management			O			1
Semester Management			O			1
DB diagrams	O					
Write Test case						
Manage Roll Call			O			
Manage Student Image	O					
Check Attendance		O				
Attendance Report			O			
Manage Teaching Calendar	O					
Manage Study Session		O				
Check own Attendance Rate		O				
Perform Testing						
Manage Roll Call			O			
Manage Student Image	O					
Check Attendance		O				
Attendance Report			O			
Manage Teaching Calendar	O					
Manage Study Session		O				
Check own Attendance Rate		O				
Installation Guide	O					
User's Guide						
Login	O					
Admin - Add Image for student	O					

6	Report 6 - Software User's Manual	Staff - Create Roll Call			O				
		Instructor - Check Attendance (Mobile)		O					
		Instructor - Check Report		O					
		User Notice							
		Image Data Notice	O						
		Position & Angle Notice	O						
		Other Notice	O						

Notes

No.	Function Types	Function Point Size
1	Insert, Delete, Update, Simple Search, Login, Register, simple function or simple query on one table	1
2	Computed functions or joined query	2
3	Complex functions or multiple subquery	3
4	Constraint process and data integrity	4
5	Functions with implementing algorithms	5