Project Objectives

O1: To automate the task of evaluation of hand-written Malayalam answer scripts.
O2: To explore different techniques to improve the accuracy of Malayalam handwriting recognition algorithms.
O3: To improve the scope and usability of the existing automated evaluation systems.
O4: To increase the familiarity with the concepts of optical character recognition and machine learning techniques.
O5: To design and implement a prototype by efficiently utilizing the diverse skills of the team,using the concepts of project management and software development.

Course Outcomes

CSD 415.CO1: Model and solve real world problems by applying knowledge across domains Cognitive knowledge level: Apply)

CSD 415.CO2: Develop products, processes or technologies for sustainable and socially relevant applications (Cognitive knowledge level: Apply).

CSD 415.CO3: Function effectively as an individual and as a leader in diverse teams and to comprehend and execute designated tasks (Cognitive knowledge level: Apply)

CSD 415.CO4: Plan and execute tasks utilizing available resources within timelines, following ethical and professional norms (Cognitive knowledge level: Apply)

CSD 415.CO5: Identify technology/research gaps and propose innovative/creative solutions (Cognitive knowledge level: Analyze)

CSD 415.CO6: Organize and communicate technical and scientific findings effectively in written and oral forms (Cognitive knowledge level: Apply)

	CO1	CO2	Justification
O1	3	3	CO1: Solve real world problem CO2: Social relevance
O2			CO1: CO2:
O3	2	1	CO1: Solve real world problem CO2: Social relevance
O4			CO1: CO2:
O5	2	3	CO1: individual tasks CO2: execute tasks

	CO3	CO4	Justification
O1			CO3: CO4:
O2	2	2	CO3: CO4:
O3		2	CO3: CO4: execute tasks
O4	2	3	CO3: individual tasks CO4: execute tasks
O5	2	3	CO3: individual tasks CO4: execute tasks

	CO5	CO6	Justification
O1	1		CO5: propose solutions CO6:
O2	3		CO5: propose solutions CO6:
O3			CO5: CO6:
O4	1	1	CO5: propose solutions CO6: communicate findings
O5	1	1	CO5: propose solutions CO6: communicate findings

O3: To generate an excel sheet from the auto-evaluated marks.

CO4 - 2 : Finding out the existing API's available and using the available resources needs to be done in order to implement the feature.Generating an excel sheet from the auto-evaluated marks is of moderate significance when considering CO4.

CO1 - 2 : By automating the generation of excel sheets, the existing problem of manually entering each students' marks is eliminated. Generating an excel sheet from the auto-evaluated marks is of moderate significance when it comes to solving a real world problem.

CO2 - 1 : Auto evaluation system being a socially relevant model when combined with the added process of generating an excel sheet inturn solve yet another redundant task of entering the marks manually and is of lesser social significance.

O3: To improve the scope and usability of the existing automated evaluation systems

O4: To increase the familiarity with the concepts of optical character recognition and machine learning techniques

CO4 -3 : Without breaking the professional norms, each member has to plan and execute the learning tasks in the assigned timeline. He/She has to find resources and get enough knowledge about the topics assigned to move on with the project. The planning and execution phase is of due importance and given high significance.

CO3 -2 : Individual learning process is crucial in this step. The leader assigns subsections to be researched and everyone has to comprehend their topics in the study jams. The task is of moderate importance.

CO5 -1 : It is important to find existing technologies and work with them if we aim to get familiarized with them but the familiarization objective is of lesser importance when it comes to innovation.

CO6 -1 : It is important to keep notes and communicate with others, each person's individual findings and what he/she gained from the learning process. Familiarization with the technologies used has lesser significance in communicating the results.

O5: To design and implement a prototype by efficiently utilizing the diverse skills of the team,using the concepts of project management and software development.

CO2-3 : Designing and implementing a prototype of significant social relevance requires efficiently utilizing the diverse skills of the team and applying various project management methods and hence it is given higher significance.

CO4-3: Proper planning and correct execution of tasks using the available resources within the given timeline is a crucial step in designing and implementing a prototype/product and hence it is given higher significance.

CO1-2: Prototype/product implementation that solves a real world problem requires integrating and applying knowledge across different domains including the diverse skills of the project team. The task is of moderate significance.

CO3 -1: To gather the diverse skills, effective functioning of each team member is required. Moderate significance is given for this outcome.

CO5 -1: To design and implement a prototype we need to identify new technologies and propose solutions even though it is of less significance.s

CO6 -1: To design and implement a prototype by efficiently utilizing the diverse skills of the team,using the concepts of project management and software development.