

Assignment Service (MongoDB Instance)

Assignment

- o _id: ObjectId
- Name: String
- Description: Text
- SubmissionDeadline: DateTime
- Status: String «Enum: assigned, preparing review, under review, completed, deleted»
- LastModifiedDate: DateTime
- CreatedDate: DateTime
- TeacherID: String
- InvolvedStudentIDs: List<String>

AuthAndProfiling Service (MongoDB Instance)

User

- o _id: ObjectId
- Name: String
- Surname: String
- Email: String «Unique»
- PasswordHash: String
- Role: String «Enum: Teacher, Student»

Assignment Submission Service (MongoDB Instance)

Submission

- o _id: ObjectId
- TextContent: Text (Mandatory)
- SubmissionTimestamp: DateTime
- Status: String «Enum: submitted, not submitted»
- AssignmentID: String
- StudentID: String
- Attachments: List<AttachmentDocument>

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AttachmentDocument

- FileName: String
- FileType: String «Enum: PDF, TXT, JPG»
- FileReference: String

Review Assignment Service (MongoDB Instance)

Rubric

- o _id: ObjectId
- Criteria: List<CriterionDocument>

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CriterionDocument

- Title: String
- Description: Text
- MinScore: Integer
- MaxScore: Integer

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PeerReviewAssignment

- o _id: ObjectId
- AssignmentID: String
- NumberOfReviewersPerSubmission: Integer
- ReviewDeadline: DateTime
- RubricID: String
- ReviewerAssignmentMode: String «Enum: Automatic, Manual»
- PeerReviewPairings: List<PeerReviewPairingDocument>

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PeerReviewPairingDocument

- ReviewerStudentID: String
- RevieweeSubmissionID: String
- Status: String «Enum: In progress, Completed»
- ReviewResults: ReviewResultDocument

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ReviewResultDocument

- PerCriterionScoresAndJustifications: Map<String, Map<String, String | Integer>>
- ReviewTimestamp: DateTime

Review Processing Service (MongoDB Instance)

AggregatedByAssignmentResult

- o _id: ObjectId
- AssignmentID: String
- OverallAverageScore: Double
- PerCriterionAverageScores: Map<String, Double>
- ScoreDistributions: Map<String, Map<Integer, Integer>>

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AggregatedBySubmissionResult

- o _id: ObjectId
- SubmissionID: String
- OverallAverageScore: Double
- NumberOfCompletedReviews: Integer
- NumberOfAssignedReviews: Integer
- PerCriterionAverageScores: Map<String, Double>

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AggregatedByReviewResult

- o _id: ObjectId
- ReviewerStudentID: String
- RevieweeSubmissionID: String
- OverallAverageScore: Double