HEXAWARE

# Assessment Platform

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# 1 Project Overview

Our Assessment Platform is designed to help Hexaware efficiently evaluate candidates through a series of tailored assessments that leverage the latest advancements in artificial intelligence. This platform aims to ease the evaluation process by allowing manual question uploads while using AI for proctoring. This ensures a seamless and secure assessment experience for candidates.

## 1.1 Objectives

- **Customization and Relevance:** This platform allows administrators to manually upload custom questions, ensuring assessments are tailored to specific job roles and organizational needs.
- **Security and Integrity**: Advanced AI proctoring monitors candidates in real-time to detect and prevent dishonest behaviors, supporting the integrity of the assessment process. Robust security measures protect candidate data and assessment content.
- **Efficiency and Scalability:** AI-driven monitoring reduces the need for extensive human supervision, making the process more efficient and scalable. Real-time alerts enable immediate intervention if suspicious activities are detected.
- **Fairness and Accuracy:** The platform ensures objective evaluation and consistent standards across all candidates, using unbiased AI technologies to uphold the integrity of the examination environment.
- **Comprehensive Feedback:** Detailed post-assessment reports provide insights into candidate performance and any proctoring flags raised, offering actionable feedback to both candidates and administrators.

## 1.2 Scope

The scope of the Assessment platform with manual question upload and AI proctoring is extensive, covering all aspects of the assessment process from question creation to real-time monitoring and post-assessment reporting. This comprehensive approach ensures a secure, fair, and efficient evaluation process, helping both candidates and organizations.

## 1.3 Key Features

- **Custom Question Upload :** Allows manual upload of custom questions.
  Supports various question formats (e.g., multiple-choice, short answer, coding challenges).
- **AI-Powered Proctoring** : Real-time monitoring of candidates.
  Detection of suspicious activities (e.g., gaze aversion, unauthorized devices).
  Automated alerts to administrators.
- **Security and Data Protection**: Encryption of candidate data and assessment content.
  Strict access control measures.
- **Scalability and Efficiency :** Automated monitoring and reporting.
  Capable of handling large volumes of candidates.
- **Fairness and Objectivity :** Unbiased AI technologies for consistent evaluation.
  Standardized assessment environment for all candidates.
- **Comprehensive Reporting and Analytics :**Detailed post-assessment reports.
  Performance analytics and data visualization tools.

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# 2 Stakeholders

In this project, the stakeholders of the Assessment platform with manual question upload and AI proctoring encompass a diverse group, each with specific roles and needs. Understanding and addressing these needs is essential for ensuring the platform's effectiveness, security, and overall success in delivering fair and reliable assessments.

Stakeholders can be categorized into primary and secondary groups based on their level of involvement and impact on the project.

## 2.1 Primary Stakeholders

These stakeholders directly influence the project and are its primary users and beneficiaries.

- **Candidates**

  Role: Take assessments to display their skills and knowledge.

  Needs: User-friendly interface, fair assessment conditions, practice tests, real-time feedback.

- **Educators and Instructors**

  Role: Evaluate candidates with their results.

  Manage the assessment process, including question uploads and monitoring

  Needs: Accurate evaluations, detailed reports, system integration, real-time proctoring alerts.

## 2.2 Secondary Stakeholders

These stakeholders provide support, resources, and oversight to ensure the successful deployment and operation.

- **IT and Security Teams**

Role: Ensure platform security and reliability.

Needs: Data encryption, secure access controls, system integration, scalability.

- **Platform Developers**

Role: Develop and enhance the platform.

Needs: User feedback, feature requirements, bug reports.

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# 3 Users and Roles

Assessment platform has three primary user roles: Candidate, Educator or Trainer and Administrator. Each role has specific responsibilities and access permissions tailored to their needs within the application.

## 3.1 Candidates

- **Role:** Participate in assessments to demonstrate their skills and knowledge.
- **Responsibilities**:Complete assessments honestly and fairly.

  Ensure a stable and conducive testing environment (e.g., good internet connection, minimal distractions).

  Follow all assessment guidelines and instructions.
- **Needs:** User-friendly interface for easy navigation.

  Fair and unbiased assessment conditions.

  Access to practice tests to familiarize yourself with the platform.

  Real-time feedback and results after assessments.

## 3.2 Educators or Instructors

- **Role:** Design, create, and upload relevant assessments tailored to specific job roles or skills.
- **Responsibilities:** Upload and organize custom assessment questions

  Develop diverse question types (multiple-choice /coding challenges).

  Ensure the quality and relevance of the assessment content.

  Continuously update and improve assessment materials based on feedback and analytics.
- **Needs:** Flexibility in creating and uploading various question formats.

  Tools for customizing and updating assessments.

  Analytics to track question performance and candidate responses.

  A platform that supports easy content management and updates.

## 3.3 Administrators

- **Role:** Manage the overall assessment process and ensure smooth operation of the platform.
- **Responsibilities**: Monitor the assessment process, including real-time AI proctoring.

  Manage user access and ensure data security.

  Address technical issues and support candidates and educators.
- **Needs:**

  User-friendly tools for uploading and managing questions.

  Robust security measures to protect data and maintain assessment integrity.

  Real-time alerts and detailed reports from AI proctoring.

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# 4 Process Flow

## 4.1 Candidates Process Flow

**Role:** Participate in assessments to showcase their skills and knowledge.

**Actions and Corresponding UI Pages:**

**Registration and Login:**

- **Action**: Create a new account or log in to an existing account.
- **UI Page:**Registration/Login Page: Fields for username, email, password, and a "Submit" button. Options for password recovery and account creation.

**System Check:**

- **Action:** Run a diagnostic check to ensure system compatibility.
- **UI Page**: System Check Page: Instructions for performing checks (e.g., internet speed, device camera and microphone), with a "Run Diagnostic" button and feedback on system readiness.

**Pre-Assessment Instructions:**

- **Action**: Review guidelines and rules for the assessment.
- **UI Page:** Instructions Page: Detailed instructions and guidelines with a "Start Assessment" button. Option to download or print instructions.

**AI Proctoring Initiation:**

- **Action**: AI proctoring system activates and checks the candidate's environment.
- **UI Page:** Proctoring Check Page: Notification that the proctoring system is starting, with instructions on what to expect and a "Proceed" button.

**Assessment Start:**

- **Action**: Begin answering assessment questions.
- **UI Page:** Assessment Interface: Main assessment screen with questions displayed, timer, navigation buttons (Next, Previous), and a "Submit" button.

**Real-Time Monitoring:**

- **Action:** AI system monitors behavior and environment during the assessment.
- **UI Page:** Monitoring Notification: Subtle indicators that the AI is monitoring (e.g., camera and microphone indicators). No direct interaction required from the candidate.

**Question Answering:**

- **Action**: Provide responses to questions.
- **UI Page:** Question Page: Form fields or interactive elements to enter responses, with options to save or skip questions.

**Assessment Submission:**

- **Action:** Submit the completed assessment.
- **UI Page:** Submission Page: Confirmation dialog or button to finalize and submit responses, with a "Submit" button and an option to review answers before final submission.

**Assessment Review:**

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- **Action:** Review submitted answers and any provided feedback.
- **UI Page:** Review Page: Display of submitted answers, feedback, and results with options to download or print the results.

## 4.2 Educator or Instructor Process Flow

**Role:** Design, create, and manage assessment content to evaluate candidates' skills and knowledge.

### Actions and Corresponding UI Pages:

**Login and Dashboard Access:**

- **Action:** Log in to the platform and access the educator's dashboard.
- **UI Page:** Login Page: Fields for username, password, and a "Login" button. Options for password recovery.

  Dashboard: Overview of ongoing assessments, recent activity, and quick links to various tools.

**Create and Upload Assessment Content:**

- **Action:** Design and upload new assessment questions and content.
- **UI Page:**Assessment Creation Page: Form fields for entering questions, answers, and options. Tools for adding various question types (multiple-choice, short answer, coding challenges, etc.), and a "Save" or "Upload" button.

**Customize Assessments:**

- **Action**: Customize existing assessments by modifying questions or adjusting settings.
- **UI Page:**Assessment Management Page: List of existing assessments with options to edit, delete, or clone. Editing interface with tools to modify questions, answers, and assessment settings.

**Preview and Test Assessments:**

- **Action:** Preview and test the assessment to ensure it works as intended.
- **UI Page:**Preview Page: Simulation of the assessment interface with sample questions and responses to test functionality before finalizing.

**Schedule Assessments:**

- **Action:** Set up and schedule assessments for candidates.
- **UI Page:** Scheduling Page: Calendar view with options to select dates and times for assessments, along with a "Schedule" button.

**Monitor Assessment Performance:**

- **Action:** Monitor and review candidate performance during the assessment period.
- **UI Page:** Monitoring Dashboard: Real-time overview of ongoing assessments, including candidate activity, live results, and any proctoring alerts or flags.

**Analyze Results and Feedback:**

- **Action:** Analyze assessment results and provide feedback.
- **UI Page:** Results Page: Detailed performance reports, analytics on question performance, and candidate feedback. Options to download or export reports.

**Update Assessment Content:**

- **Action:** Make updates or improvements to assessment content based on feedback and performance analysis.

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- **UI Page:** Content Update Page: Interface for editing and updating questions and answers, with a “Save” or “Update” button.

**Manage Assessment Access:**

- **Action**: Control access to assessments and manage permissions for different user roles.
- **UI Page**:Access Management Page: Tools for setting permissions, managing user access, and assigning roles for various assessments.

## 4.3 Administrator Process Flow

**Role:** Oversee the overall management and operation of the assessment platform, including user management, assessment setup, and system monitoring.

### Actions and Corresponding UI Pages:

**Login and Dashboard Access:**

- **Action:** Log in to the platform and access the administrator’s dashboard.
- **UI Page:**Login Page: Fields for username, password, and a “Login” button. Options for password recovery.

  Dashboard: Overview of system status, recent activities, user management, and quick links to administrative tools.

**Manage User Accounts:**

- **Action:** Create, modify, or delete user accounts for candidates, educators, and other administrators.
- **UI Page:** User Management Page: List of user accounts with options to add new users, edit existing accounts, or delete users. Fields for user roles, permissions, and account details.

**Schedule and Configure Assessments:**

- **Action:** Set up and configure assessments, including timing, accessibility, and proctoring settings.
- **UI Page:** Assessment Configuration Page: Interface for scheduling assessments, setting parameters (e.g., time limits, allowed resources), and configuring AI proctoring settings.

**Monitor System Performance and Proctoring:**

- **Action:** Monitor system performance, proctoring alerts, and overall assessment activity.
- **UI Page:** System Monitoring Dashboard: Real-time view of system health, proctoring alerts, ongoing assessments, and candidate behavior. Alerts and notifications for any issues.

**Generate and Review Reports:**

- **Action:** Generate and review performance reports, usage statistics, and compliance documentation.
- **UI Page:** Reports Page: Tools for generating various reports, including assessment performance, user activity, and system compliance. Options to export or download reports.

**Manage Security and Data Privacy:**

- **Action:** Ensure security measures are in place and data privacy regulations are followed.
- **UI Page**: Security Settings Page: Options for configuring security protocols, managing access controls, and reviewing audit logs. Tools to ensure data encryption and compliance.

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# 5 UI Pages

## 5.1 Candidates UI Pages

**Registration and Login Page**

**Components:**

- Input fields for username/email and password
- "Login" button
- "Create Account" link for new users
- "Forgot Password" link for password recovery

**Functionality:**

- User authentication and session creation
- Account creation process
- Password recovery workflow

**Design:**

- Clean and simple layout with a form in the center
- Branded header with logo
- Minimalistic color scheme to maintain focus on the form fields
- Clear and concise text on buttons and links

**Dashboard Page**

**Components:**

- Calendar view or list of scheduled assessments
- Notification panel
- Links to profile settings and support

**Functionality:**

- Display of upcoming assessments
- Notification management
- Navigation to different sections of the platform

**Design:**

- Dashboard layout with a sidebar for navigation
- Main content area for calendar or list view
- Notification area with icons for unread messages
- User-friendly icons and labels for easy navigation

**System Check Page**

**Components:**

- Step-by-step instructions
- "Run Diagnostic" button

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- Status indicators (pass/fail)

**Functionality:**

- System compatibility check (internet speed, camera, microphone)
- Real-time feedback on system readiness

**Design:**

- Instructional text with icons for each step
- Prominent diagnostic button
- Clear pass/fail indicators with explanatory text.

**Pre-Assessment Instructions Page**

**Components**:

- Text instructions and guidelines
- "Start Assessment" button
- Download/print buttons

**Functionality:**

- Display of assessment rules and guidelines
- Option to start the assessment
- Ability to download or print instructions

**Design:**

- Organized text blocks for instructions
- Prominent start button
- Simple, accessible design for easy reading

**Proctoring Check Page**

**Components:**

- Informational text about proctoring
- "Proceed" button

**Functionality:**

- Notification and initialization of AI proctoring
- User acknowledgment before starting the assessment

**Design**:

- Brief, informative text
- Clear, noticeable proceed button

**Assessment Interface Page**

**Components:**

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- Question text and answer input fields
- Timer
- Navigation buttons (Next, Previous)
- "Submit" button

**Functionality:**

- Display and interaction with assessment questions
- Time tracking
- Navigation through questions
- Submission of completed assessment

**Design:**

- Clean, distraction-free layout
- Clear navigation buttons
- Prominent timer display
- Easy-to-read question text and input fields

**Monitoring Notification Page**

**Components**:

- Visual indicators of active monitoring (camera and microphone icons)
- Informational text

**Functionality**:

- Notify candidate of active AI proctoring

**Design**:

- Subtle yet visible indicators
- Simple informational text

**Submission Page**

**Components:**

- Confirmation dialog
- Review option
- "Submit" button

**Functionality:**

- Finalize and submit assessment responses
- Option to review answers before submission

**Design:**

- Clear confirmation dialog with yes/no options
- Prominent submit button

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- Review button for last-minute checks

**Result Page**

**Components**:

- List of recently completed assessments with scores and status
- "View Detailed Results" button for each result

**Functionality**:

- Show recent assessment results with quick access to detailed results.
- Allows candidates to download or print their results for future reference

**Design**:

- Prominently displayed at the top.
- Use of larger fonts and bold text for key information like overall score and status.

## 5.2 Educator or Instructor UI Pages

**Login Page**

**Components:**

- Username/Email input field
- Password input field
- "Forgot Password" link
- "Sign In" button
- "Sign Up" link for new users

**Functionality:**

- Authentication and validation
- Redirect to dashboard upon successful login

**Design**:

- Clean and simple layout
- Branding elements (logo, colors)
- Responsive design for various devices

**Dashboard**

**Components**:

- Navigation menu (Home, Assessments, Reports, Settings)
- Overview of recent activities

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- Notifications panel
- Quick links to create new assessments or upload questions

**Functionality**:

- Central hub for accessing different features
- Display of key metrics and stats

**Design:**

- Card-based layout for easy readability and Interactive charts and graphs.

**Assessment Creation Page**

**Components**:

- Form fields for assessment title, description, and settings
- Question upload section (manual upload, bulk upload, question bank)
- Question type selection (MCQ, descriptive, coding, etc.)
- AI-powered suggestion box for potential questions

**Functionality**:

- Input validation
- Save as draft and publish options
- AI assistance for question creation

**Design**:

- Step-by-step wizard for guided creation
- Tooltips and help icons for user assistance

**Manual Question Upload Page**

**Components:**

- Text fields for question, options, and correct answer
- Types of question format (MCQ and Coding based questions)
- Rich text editor for formatting
- Tags and categories selection
- Preview section

**Functionality**:

- Real-time validation and feedback
- Save and preview options

**Design**:

- Clean and intuitive layout
- Consistent styling with the rest of the platform

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**AI Proctoring Setup Page**

**Components**:

- Configuration options for proctoring settings (webcam, microphone, screen recording)
- Test environment setup guide
- Proctoring rules and guidelines

**Functionality:**

- Integration with AI proctoring tools
- Real-time environment checks
- Detailed instructions for test-takers

**Design**:

- User-friendly interface with clear instructions
- Visual indicators for successful setup

**Assessment Management Page**

**Components**:

- List of created assessments
- Filters and search bar
- Action buttons (edit, delete, view results)

**Functionality**:

- Easy management of existing assessments
- Bulk actions support

**Design**:

- Tabular layout with sortable columns
- Clear and concise information display

**Assessment Preview Page**

**Components**:

- Instructions and timer
- Questions display area
- Navigation between questions
- Submit button

**Functionality**:

- Timer and auto-submit functionality
- Real-time proctoring alerts

**Design**:

- Distraction-free layout

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- Consistent styling with focus on readability

**Proctoring Dashboard**

**Components**:

- Live feed from test-takers webcam
- Alerts and notifications panel
- Action buttons (pause, flag, terminate)

**Functionality**:

- Real-time monitoring
- Automatic flagging of suspicious activities

**Design**:

- Multi-feed support for monitoring multiple test-takers
- Clear visual indicators for alerts

**Reports and Analytics Page**

**Components**:

- Assessment results summary
- Detailed reports for individual assessments
- Performance analytics (graphs, charts)

**Functionality**:

- Export options (PDF, Excel)
- Customizable report generation

**Design**:

- Interactive and visually appealing charts
- Easy-to-navigate report sections

**Settings Page**

**Components**:

- Profile settings (name, email, password)
- Notification preferences
- Integrations and API keys management

**Functionality**:

- User account management
- Platform configuration settings

**Design**:

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- Organized into sections for easy navigation
- Consistent styling with the rest of the platform

## 5.3 Administrator UI Pages

**Admin Login Page**

**Components**:

- Username/Email input field
- Password input field
- "Forgot Password" link
- "Sign In" button

**Functionality**:

- Authentication and validation
- Redirect to the admin dashboard upon successful login

**Design**:

- Simple, secure, and professional layout
- Branding and platform-specific elements

**Admin Dashboard**

**Components**:

- Navigation menu (Dashboard, Users, Assessments, Reports, Settings)
- Key metrics and system status overview
- Recent activity feed
- Quick access to common actions (e.g., add user, create assessment)

**Functionality**:

- Central hub for accessing various admin functions
- Real-time updates and system alerts

**Design**:

- Dashboard with widgets for metrics, charts, and system status
- Clear, visual representation of data and system health

**User Management Page**

**Components**:

- List of users with search and filter options
- User profile details (name, role, status)
- Action buttons (edit, deactivate, delete)
- Bulk user management options (import, export)

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**Functionality**:

- View and manage user accounts
- Modify user roles and permissions
- Bulk operations for user management

**Design**:

- Tabular layout with sortable columns
- Clear user details and action buttons
- User-friendly design with intuitive controls

**Assessment Management Page**

**Components**:

- List of assessments with search and filter options
- Assessment details (title, status, date created)
- Action buttons (edit, delete, view results)
- Bulk actions (archive, delete)

**Functionality**:

- Manage and oversee all assessments
- Perform actions like editing, deleting, or archiving assessments

**Design**:

- Table or card-based layout with clear information display
- Easy navigation between assessments and detailed views

**Manual Question Upload Page**

**Components**:

- Form for uploading questions with fields for question text, options, and answers
- Bulk upload option (CSV or Excel file)
- Preview section
- Question categorization and tagging

**Functionality**:

- Add and manage questions manually
- Validate and preview questions before adding them

**Design**:

- Clean, straightforward form layout
- Bulk upload interface with progress indicators
- Consistent styling for ease of use

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**AI Proctoring Configuration Page**

**Components**:

- Settings for AI proctoring features (webcam, microphone, screen recording)
- Configuration options for proctoring rules and guidelines
- Integration settings with AI tools

**Functionality**:

- Configure and manage AI proctoring settings
- Set up rules and guidelines for proctoring

**Design**:

- User-friendly setup interface with clear instructions
- Visual indicators for configuration status

**Reports and Analytics Page**

**Components**:

- Summary of system and user activity
- Detailed reports on assessments and proctoring
- Performance metrics and analytics, Export options (PDF, Excel)

**Functionality**:

- Generate and view detailed reports
- Analyze performance data and system usage

**Design**:

- Interactive charts and graphs
- Clean, organized layout for data presentation

**System Settings Page**

**Components**:

- Platform-wide settings (branding, email templates, notifications)
- User roles and permissions management
- Integration and API settings

**Functionality**:

- Configure global settings for the platform
- Manage integrations and API configurations

**Design**:

- Structured layout with categorized settings
- Easy-to-navigate sections for different configuration areas

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**Audit Logs Page**

**Components**:

- Log entries with filters for date, user, and action type
- Details of each log entry (user action, timestamp, changes made)

**Functionality**:

- View and audit system activity and user actions
- Filter and search logs for specific entries

**Design**:

- Tabular layout with clear, sortable columns
- Detailed view for each log entry

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# 6 Algorithms and Use Case

## 6.1 Algorithms for Assessment management

### a. Natural Language Processing (NLP) Algorithms

**Text Classification:**

- **Algorithm:** Support Vector Machines (SVM), Naive Bayes, Transformer-based models (BERT, GPT).
- **Use Case:** Categorizing questions or answers into predefined topics or difficulty levels.

**Named Entity Recognition (NER):**

- **Algorithm:** Conditional Random Fields (CRF), BiLSTM-CRF, Transformer-based models
- **Use Case:** Identifying and extracting key entities (names, dates, locations) in free-text responses.

**Sentiment Analysis:**

- **Algorithm:** Recurrent Neural Networks (RNN), LSTM, Transformer-based models
- **Use Case:** Assessing the sentiment or tone of descriptive answers to gauge emotional content or detect inappropriate language.

**Text Summarization:**

- **Algorithm:** Sequence-to-sequence models with attention, Transformer-based models (BART, T5)
- **Use Case:** Summarizing lengthy descriptive answers for easier grading.

### b. Machine Learning (ML) Algorithms

**Supervised Learning:**

- **Algorithm**: Random Forest, Gradient Boosting Machines (GBM), Deep Neural Networks (DNN)
- **Use Case:** Predicting scores for descriptive answers based on historical grading data.

**Unsupervised Learning:**

- **Algorithm:** K-means clustering, Hierarchical clustering
- **Use Case:** Grouping similar responses or questions for pattern analysis and insights.

**Reinforcement Learning:**

- **Algorithm:** Q-learning, Deep Q-Networks (DQN).
- **Use Case:** Adapting assessment difficulty in real-time based on the test-taker's performance.

### c. Predictive Analytics Algorithm

**Regression Analysis:**

- **Algorithm:** Linear Regression, Ridge Regression, Lasso Regression
- **Use Case:** Forecasting future performance or identifying trends over time.

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**Classification Algorithms:**

- **Algorithm:** Logistic Regression, Decision Trees, SVM
- **Use Case:** Predicting the likelihood of a test-taker passing or failing based on their responses.

### d. Recommendation Systems

**Content-Based Filtering:**

- **Algorithm:** TF-IDF, Cosine Similarity, Neural Collaborative Filtering
- **Use Case:** Recommending questions or study materials based on the content and user's past

**Collaborative Filtering:**

- **Algorithm:** Matrix Factorization (SVD), K-Nearest Neighbors (KNN)
- **Use Case:** Suggesting questions or resources based on similar users' behaviors and preferences.

## 6.2 Algorithms for AI Proctoring

### a. Computer Vision Algorithms

**Facial Recognition:**

- **Algorithm:** Convolutional Neural Networks (CNN), FaceNet, OpenFace
- **Use Case:** Verify the identity of test-takers and monitor for identity fraud.

**Eye Tracking:**

- **Algorithm:** Hough Transform, CNN-based models
- **Use Case:** Detect if the test-taker is looking away from the screen or engaging in suspicious activities.

**Motion Detection:**

- **Algorithm:** Background Subtraction, Optical Flow, CNN-based models
- **Use Case:** Identify unusual movements or activities that may indicate cheating.

### b. Audio Analysis Algorithms

**Speech Recognition:**

- **Algorithm:** Hidden Markov Models (HMM), RNN, Transformer-based models (Wav2Vec)
- **Use Case:** Transcribe and analyze ambient sounds for potential violations.

**Sound Anomaly Detection:**

- **Algorithm:** Autoencoders, Gaussian Mixture Models (GMM)
- **Use Case:** Detect unusual sounds that could indicate cheating or unauthorized assistance.

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# 7 Report Generation

## 7.1 Assessment Reports

### a. Overall Performance Report

**Contents:**

- Summary of overall test scores.
- Average, highest, and lowest scores.
- Performance distribution across different sections or topics.

**Format:** PDF, Excel
**Use Case:** To provide an overview of how all test-takers performed in an assessment.

### b. Detailed Question Analysis Report

**Contents:**

- Breakdown of each question's performance.
- Percentage of correct and incorrect responses.
- Analysis of frequently missed questions.

**Format:** PDF, Excel
**Use Case:** To identify difficult questions and common misconceptions.

### c. Individual Performance Report

**Contents:**

- Detailed scores of an individual test-taker.
- Time spent on each question.
- Correct and incorrect answers with explanations.

**Format:** PDF, Excel
**Use Case:** To give test-takers personalized feedback on their performance.

## 7.2 Proctoring Reports

### a. Proctoring Summary Report

**Contents:**

- Overall summary of proctoring activities.
- Number of flagged incidents.
- General behavior patterns observed.

**Format:** PDF
**Use Case:** To provide a high-level overview of the proctoring session.

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### b. Detailed Proctoring Incident Report

**Contents:**

- Detailed logs of flagged incidents.
- Video clips or screenshots of suspicious activities.
- Analysis of specific behaviors that triggered alerts.

**Format:** PDF, Video files (as attachments or links)
**Use Case:** To review specific incidents in detail for potential cheating.

### c. Proctoring Analytics Report

**Contents:**

- Statistical analysis of proctoring data.
- Heatmaps of eye movements and screen interactions.
- Patterns and trends in proctoring alerts.

**Format:** PDF, Excel
**Use Case:** To analyze and improve the effectiveness of AI proctoring.

## 7.3 User Activity Reports

### a. Login and Usage Report

**Contents:**

- Frequency and duration of user logins.
- Pages and features accessed.
- Time spent on different sections of the platform.

**Format:** PDF, Excel
**Use Case:** To monitor user engagement and identify areas for improvement.

### b. Activity Log Report

**Contents:**

- Detailed log of user activities.
- Actions taken during assessments and proctoring sessions.
- Timestamped records of key events.

**Format:** PDF, Excel
**Use Case:** To track user actions for auditing and compliance purposes.

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HEXAWARE

# About Hexaware

Hexaware is a global technology and business process services company. Our 28,400 Hexawarians wake up every day with a singular purpose; to create smiles through great people and technology. With this purpose gaining momentum, we are well on our way to realizing our vision of being the most loved digital transformation partner in the world. We also seek to protect the planet and build a better tomorrow for our customers, employees, partners, investors, and the communities in which we operate.

With 45+ offices in 19 countries, we empower enterprises worldwide to realize digital transformation at scale and speed by partnering with them to build, transform, run, and optimize their technology and business processes.

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