# EntryTestGuru - Comprehensive Feature Stories

## **Features List**

## **Authentication & User Management**

#### **Anonymous User Flow**

#### User Stories

- As a curious student, I want to try the platform without signing up,
  so that I can evaluate if it's worth my time before committing
- As an anonymous user, I want to see exactly what limits I have, so that I understand the value of upgrading
- As a trial user, I want to seamlessly upgrade when I hit my limits, so that my learning isn't interrupted
- As a returning anonymous user, I want my previous session data preserved, so that I don't lose my progress

#### **UX/UI Considerations**

- User lands on welcome screen with clear "Continue as Guest" prominent button alongside "Sign Up" options
- Onboarding flow shows exam category selection with visual preview of question types and ARDE data availability
- Dashboard displays usage meter showing "18/20 practice questions remaining today" with progress bar
- Each interaction shows gentle reminder of tier benefits without being intrusive
- When approaching limits, soft prompts appear: "2 questions left today
  unlock unlimited practice"
- Limit reached state shows motivational upgrade screen with clear value proposition

## **Core Experience**

- Empty State: Clean welcome screen with exam category cards, each showing sample question count and ARDE coverage percentage
- Active Usage: Real-time usage tracking with subtle progress indicators and celebratory micro-animations for milestones
- Limit Approaching: Warm orange accent colors with gentle pulsing animations on upgrade buttons
- Limit Reached: Elegant blocking screen with preview of premium features and seamless upgrade flow

## **Advanced Users & Edge Cases**

- Session Recovery: If user closes app and returns, graceful restoration of previous session with continuation prompts
- Multiple Device Access: Anonymous sessions tied to device fingerprint with optional cloud backup via one-time code
- **Data Migration**: When upgrading to registered account, all anonymous progress transfers with confirmation dialog
- Offline Behavior: Anonymous users get limited offline access with clear online synchronization indicators

## **Multi-Device Authentication System**

## **Device Management Flow**

#### User Stories

- As a student with multiple devices, I want to see all my connected devices, so that I can manage my account security
- As a user adding a 4th device, I want to easily remove an old device, so that I can access my account on my new device
- As a security-conscious user, I want to know when someone tries to access my account, so that I can protect my data
- As a user with multiple browsers, I want them treated as one device, so that I don't waste device slots unnecessarily

#### **UX/UI Considerations**

#### Step-by-step User Journey:

- User attempts login on 4th device and sees friendly blocking screen:
  "Account limit reached"
- Interactive device list shows: "My Laptop (Chrome, Firefox, Safari) Last active 2 hours ago"
- Each device card has "Remove" button with confirmation dialog explaining immediate logout
- Push notification sent to existing devices: "New login attempt from iPhone - Manage devices"
- Real-time updates show device status changes across all active sessions

## **Core Experience**

- **Device Registry**: Clean card-based layout with device icons, custom names, and session indicators
- Active Status: Green dot indicators for online devices with "Last seen" timestamps
- **Browser Consolidation**: Desktop devices show expandable browser session list with individual session management
- Removal Flow: Smooth slide-out animation with confirmation dialog and immediate cross-device updates

## **Advanced Users & Edge Cases**

- **Fingerprint Conflicts**: When 85% similarity detected, user sees merge suggestion dialog with device comparison
- **Network Interruptions**: Graceful handling of device status updates with retry mechanisms
- Emergency Access: Account recovery flow for users locked out due to device limit issues
- Session Hijacking Protection: Suspicious activity detection with automatic device unregistration and user notification

## **Question Bank & Content Management**

**Content Discovery & Filtering** 

#### User Stories

- As a focused student, I want to filter questions by ARDE probability, so that I can prioritize high-yield topics
- As a struggling student, I want to focus on my weak areas, so that I can improve my overall performance
- As a content creator, I want to see which questions need more variations, so that I can prioritize my content creation
- As an admin, I want to track question performance, so that I can identify content gaps

#### **UX/UI Considerations**

#### Step-by-step User Journey:

- User opens practice mode and sees filter interface with ARDE probability slider and visual indicators
- Question cards show probability badges: "High ARDE" (red), "Medium ARDE" (orange), "Low ARDE" (gray)
- Smart recommendations appear: "Based on your performance, try High ARDE Physics questions"
- Filter combinations save automatically with named presets: "My Weak Areas + High ARDE"
- Search supports natural language: "difficult calculus questions from last year's exam"

## **Core Experience**

- **Filter Interface**: Collapsible sidebar with progressive disclosure basic filters visible, advanced filters expandable
- Question Cards: Clean layout with subject icons, difficulty indicators,
  ARDE badges, and attempt history dots
- Loading States: Skeleton screens with shimmer effects while questions load from cache or network
- **Empty Results**: Helpful empty states with filter adjustment suggestions and alternative recommendations

## **Advanced Users & Edge Cases**

- **Complex Filtering**: Multiple filter combinations with visual tag system showing active filters
- **Performance Optimization**: Intelligent caching with background prefetching based on user patterns
- **Content Conflicts**: When questions have conflicting difficulty ratings, show averaged values with source indicators
- **Version Control**: Question updates show change indicators with rollback options for admins

## **Practice Mode & Learning Engine**

#### **Interactive Learning Experience**

- User Stories
  - As a practicing student, I want immediate feedback on my answers, so that I can learn from my mistakes quickly
  - As a time-conscious student, I want to see how long I'm taking per question, so that I can improve my speed
  - As a visual learner, I want rich explanations with diagrams, so that I can understand concepts better
  - As a mobile user, I want smooth offline practice, so that I can study during my commute

#### **UX/UI Considerations**

- User selects practice mode and chooses question filters with visual preview of question count
- Question interface shows clean MCQ layout with subtle timer and attempt counter
- Answer selection provides immediate visual feedback with smooth color transitions
- Explanation panel slides up with text, diagrams, and "Ask Al" button for follow-up questions
- Progress tracking shows session statistics with encouraging microanimations for streaks

## **Core Experience**

- Question Interface: Minimalist design with focus on question text, clear answer options, and non-intrusive timing
- **Feedback States**: Green checkmarks for correct answers, red X for incorrect, with gentle haptic feedback
- Explanation Modal: Expandable content area with tabbed interface for text explanations, videos, and AI chat
- Progress Indicators: Circular progress rings showing session completion with satisfying fill animations

## **Advanced Users & Edge Cases**

- Offline Synchronization: Cached questions with background sync indicators and conflict resolution
- **Connection Loss**: Graceful degradation with saved progress and resume functionality
- Multiple Attempts: Visual attempt indicators (circles filling up) with performance tracking per attempt
- Accessibility: Screen reader support, high contrast mode, and keyboard navigation for all interactions

## **Sprint Exams & Simulated Real Exams**

#### Realistic Exam Environment

#### User Stories

- As an exam-anxious student, I want realistic practice conditions, so that I can build confidence for the real exam
- As a strategic student, I want to configure custom sprint exams, so that I can focus on specific weaknesses
- As a time-pressured student, I want accurate timing simulation, so that I can practice time management
- As a performance tracker, I want detailed analytics after exams, so that I can identify improvement areas

#### **UX/UI Considerations**

#### Step-by-step User Journey:

- User selects exam type with clear differentiation between Sprint (custom) and SRE (real exam replica)
- Configuration screen shows intuitive sliders for question count, time limits, and difficulty distribution
- Pre-exam checklist ensures user understands requirements: "Stay connected throughout exam"
- Exam interface enters distraction-free mode with prominent timer and question navigator
- Post-exam analytics show comprehensive performance breakdown with actionable insights

## **Core Experience**

- Exam Setup: Visual configuration interface with real-time preview of selected parameters
- **Exam Environment**: Full-screen mode with minimal UI, prominent timer, and clear navigation controls
- Timer Interface: Large, readable countdown with color transitions (green → yellow → red) as time decreases
- Results Dashboard: Interactive charts showing time per question, accuracy trends, and topic performance

## **Advanced Users & Edge Cases**

- **Connection Monitoring**: Real-time connection status with graceful recovery from brief disconnections
- **Browser Restrictions**: Preventing tab switching and other cheating behaviors during exam mode
- **Emergency Situations**: Pause functionality for genuine emergencies with admin override capabilities
- Performance Optimization: Efficient question loading to prevent delays during timed exams

## **AI-Powered Tutoring & Explanation System**

#### **Intelligent Learning Assistant**

#### User Stories

- As a confused student, I want to ask follow-up questions about explanations, so that I can truly understand concepts
- As a deep learner, I want the AI to remember our previous discussions, so that conversations build on each other
- As a fair-use conscious user, I want to see my explanation limits, so that I can use them strategically
- As a premium user, I want unlimited access to AI tutoring, so that I can get help whenever needed

#### **UX/UI Considerations**

### Step-by-step User Journey:

- User answers question incorrectly and sees explanation with "Chat with Al Tutor" button
- Al chat interface opens with context about the specific question and user's answer
- Conversation maintains context across multiple exchanges with clear conversation boundaries
- Usage indicator shows remaining explanations with elegant countdown and upgrade prompts
- Al responses include relevant examples and check for understanding

## **Core Experience**

- Chat Interface: WhatsApp-style conversation with clear AI vs user message distinction
- **Context Indicators**: Subtle visual cues showing which question/topic the conversation relates to
- **Usage Tracking**: Non-intrusive progress indicators showing explanation limits with tier upgrade options
- Response Quality: Typing indicators, smooth message delivery, and error recovery for failed requests

## **Advanced Users & Edge Cases**

- Context Management: When approaching token limits, graceful conversation summarization and continuation
- Multi-Question Discussions: Clear visual separation when conversations span multiple questions
- Offline Behavior: Cached explanations available offline with sync indicators for AI conversations
- **Content Moderation**: Automatic filtering of inappropriate content with human review escalation

## **Analytics & Performance Tracking Engine**

#### **Comprehensive Learning Insights**

- User Stories
  - As a data-driven student, I want detailed performance analytics, so that I can optimize my study strategy
  - As a progress tracker, I want to see improvement over time, so that I can stay motivated
  - As a strategic learner, I want ARDE probability performance data, so that I can focus on high-value questions
  - As an export-minded user, I want to download my data, so that I can analyze it externally

#### **UX/UI Considerations**

- User accesses analytics dashboard with clear overview cards showing key metrics
- Interactive charts allow drilling down into specific time periods and subjects
- Performance insights highlight patterns: "You're 23% faster on Physics questions this week"
- ARDE probability analysis shows strategic recommendations for exam preparation
- Export functionality provides CSV/PDF reports with customizable date ranges and metrics

## **Core Experience**

- Dashboard Overview: Card-based layout with key performance indicators and trend sparklines
- Interactive Charts: Touch-responsive graphs with zoom, pan, and detail-on-demand functionality
- **Insight Cards**: Al-generated insights presented as digestible cards with actionable recommendations
- **Time Range Selection**: Intuitive date picker with preset ranges (Last 7 days, This month, etc.)

## **Advanced Users & Edge Cases**

- **Data Visualization**: Responsive charts that work well on mobile with appropriate touch targets
- **Performance Optimization**: Efficient data loading with progressive enhancement and caching
- **Data Privacy**: Clear data retention policies with user control over data deletion
- Cross-Device Sync: Seamless analytics sync across all user devices with conflict resolution

## **Social Features & Community Platform**

#### **Collaborative Learning Environment**

- User Stories
  - As a competitive student, I want to see leaderboards, so that I can measure myself against peers
  - As a study group member, I want to track our collective progress, so that we can support each other
  - As a motivated learner, I want to participate in challenges, so that I can stay engaged
  - As a social learner, I want to share achievements, so that I can celebrate progress with friends

#### **UX/UI Considerations**

#### Step-by-step User Journey:

- User creates or joins study groups with clear privacy settings and member management
- Leaderboard interface shows rankings with appropriate anonymization and achievement badges
- Group dashboard displays collective progress with individual contributions visible to members
- Challenge participation shows progress tracking with social celebration of milestones
- Achievement sharing generates beautiful social media cards with personal statistics

## **Core Experience**

- Leaderboards: Clean ranking interface with user's position highlighted and contextual peer groupings
- **Group Management**: Intuitive member invitation system with role-based permissions
- Challenge Interface: Engaging progress tracking with team vs individual challenge options
- Achievement System: Celebration animations with shareable badge collection

## **Advanced Users & Edge Cases**

- **Privacy Controls**: Granular privacy settings for performance data visibility within groups
- Moderation Tools: Automated content filtering with human review for inappropriate behavior
- **Cross-Timezone Coordination**: Smart scheduling for global study groups with timezone awareness
- Performance Impact: Efficient social features that don't impact core learning experience performance

## **Subscription Management & Monetization**

#### **Seamless Upgrade Experience**

#### User Stories

- As a trial user, I want clear upgrade prompts, so that I understand the value of premium features
- As a paying customer, I want transparent billing, so that I know exactly what I'm paying for
- As a subscription manager, I want easy payment method updates, so that I can avoid service interruptions
- As a grace period user, I want clear communication about my status, so that I can make informed decisions

#### **UX/UI Considerations**

### Step-by-step User Journey:

- User encounters gentle upgrade prompts when approaching usage limits
- Paddle.com integration provides secure, localized payment processing with multiple payment methods
- Subscription dashboard shows clear billing history, next payment date, and usage statistics
- Grace period interface shows countdown with clear action items and payment options
- Downgrade flow preserves data while clearly communicating feature restrictions

## **Core Experience**

- Upgrade Flow: Seamless integration with Paddle.com maintaining app design consistency
- **Billing Dashboard**: Clean interface showing subscription status, usage, and payment history
- **Grace Period Indicators**: Prominent but non-intrusive countdown with clear resolution steps
- **Feature Gating**: Elegant blocking screens that educate rather than frustrate users

## **Advanced Users & Edge Cases**

- Payment Failures: Graceful error handling with multiple retry options and support escalation
- **Regional Pricing**: Automatic currency and pricing adjustments based on user location
- **Subscription Changes**: Mid-cycle upgrades/downgrades with prorated billing calculations
- Tax Compliance: Automatic tax calculation and receipt generation for business users

## **Device Management & Account Settings**

#### **Comprehensive Device Control**

- User Stories
  - As a multi-device user, I want to see all my connected devices, so that I can manage my account security
  - As a security-conscious user, I want to customize device names, so that I can easily identify them
  - As a browser user, I want my desktop treated as one device, so that I don't waste device slots
  - As a device manager, I want real-time status updates, so that I know which devices are active

#### **UX/UI Considerations**

- User accesses device management from account settings with clear overview of all registered devices
- Device cards show custom names, device types, browser sessions, and last active timestamps
- Real-time status indicators update across all devices when changes
- Device removal triggers immediate logout with cross-device notifications

 Browser consolidation shows expandable session details with individual management options

## **Core Experience**

- Device Registry: Card-based interface with clear device identification and status indicators
- Real-time Updates: Live status changes with smooth animations and immediate cross-device sync
- Browser Sessions: Expandable device cards showing individual browser sessions with management controls
- Security Alerts: Immediate notifications for new device additions with approval workflows

## **Advanced Users & Edge Cases**

- **Fingerprint Conflicts**: Smart device merging suggestions with user confirmation dialogs
- Emergency Access: Account recovery options for users locked out due to device management issues
- Session Security: Automatic logout on suspicious activity with reauthentication requirements
- Cross-Platform Consistency: Unified device management experience across mobile and web platforms

## **Account Recovery & Security Management**

#### Comprehensive Recovery System

- User Stories
  - As a forgetful user, I want to reset my password easily, so that I can regain access to my account
  - As a locked-out user, I want multiple recovery options, so that I can recover my account even if I lose access to my email/phone
  - As a security-conscious user, I want to know when someone attempts to access my account, so that I can protect my data

- As a device-limited user, I want emergency account access, so that
  I can manage my devices when locked out
- As a compromised user, I want to secure my account quickly, so that I can prevent unauthorized access

#### **UX/UI Considerations**

#### Step-by-step User Journey:

- User attempts login and selects "Forgot Password" with multiple recovery method options
- System provides step-by-step recovery process with clear progress indicators and estimated completion times
- Multi-factor verification through email, SMS, and security questions with fallback options
- Emergency recovery flow for users locked out due to device limits or compromised accounts
- Post-recovery security review showing recent login attempts and recommended security actions

## **Core Experience**

- **Recovery Initiation**: Clean interface with multiple recovery options (email, phone, security questions, emergency contact)
- Progress Tracking: Step-by-step wizard with clear completion indicators and time estimates
- Verification Methods: Multiple verification channels with user choice and fallback options
- **Security Dashboard**: Post-recovery overview of account security status with recommended actions

## **Advanced Users & Edge Cases**

- Device Limit Lockout: Emergency recovery flow when all 3 devices are lost/compromised
- Compromised Account: Rapid security lockdown with admin intervention capabilities

- Multiple Failed Attempts: Progressive security measures with coolingoff periods
- Cross-Platform Recovery: Seamless recovery experience across mobile and web platforms

## **Content Quality Assurance & Support System**

#### **Collaborative Quality Management**

- User Stories
  - As a quality-focused student, I want to report incorrect questions, so that content accuracy improves
  - As a content creator, I want to see user feedback, so that I can prioritize improvements
  - As a support user, I want multiple contact methods, so that I can get help when needed
  - As an admin, I want efficient review workflows, so that I can maintain content quality

#### **UX/UI Considerations**

#### Step-by-step User Journey:

- User encounters questionable content and uses in-app reporting with categorized issue types
- Reporting interface allows detailed feedback with screenshot capabilities and context preservation
- Support system provides multiple contact options with expected response time indicators
- Admin dashboard shows prioritized issues with batch processing capabilities
- User feedback loop provides updates on reported issues with resolution confirmations

## **Core Experience**

• **Issue Reporting**: Contextual reporting interface with smart categorization and evidence collection

- **Support Channels**: Multi-channel support access with appropriate escalation paths
- **Feedback Loop**: Transparent issue tracking with user notifications about resolution progress
- Quality Metrics: Dashboard showing content quality scores and improvement trends

## **Advanced Users & Edge Cases**

- Bulk Issue Handling: Efficient admin tools for processing multiple similar reports
- False Positive Management: Smart filtering to identify and handle incorrect user reports
- **Emergency Escalation**: Priority handling for critical content errors affecting exam preparation
- Community Moderation: User reputation system for trusted community contributors

## **Key Integration Points & Cross-Feature Considerations**

## Question Selection Algorithm (QSA) - Future Development Priority

**Strategic Importance**: This algorithm will be the heart of EntryTestGuru's competitive advantage, determining which questions users see based on:

- ARDE probability weightings
- Individual performance patterns
- Time until exam date
- Learning velocity and retention rates
- Optimal challenge curve for sustained engagement

**Recommended Approach**: Develop machine learning model that balances:

1. Immediate Value: High ARDE probability questions for exam success

- 2. Learning Efficiency: Spaced repetition for knowledge retention
- 3. **Engagement**: Appropriate difficulty progression to maintain motivation
- 4. **Personalization**: Adaptive selection based on individual learning patterns

## **Performance Data Visibility Guidelines**

#### **Recommended Social Analytics Sharing Levels:**

- Public Leaderboards: Overall scores, streaks, and achievements only
- **Study Groups**: Detailed topic performance, study time, and progress trends
- Individual Profiles: Full analytics access with export capabilities
- Competitive Challenges: Challenge-specific metrics with temporary visibility

## **Offline Capability Strategy**

#### **Recommended Implementation:**

- **Smart Caching**: Pre-load questions based on user patterns and preferences
- Sync Indicators: Clear visual feedback about online/offline status and sync progress
- **Conflict Resolution**: Graceful handling of offline progress when returning online
- **Storage Management**: Intelligent cache cleanup to manage device storage efficiently