

AI Onboarding Wizard - API Documentation

Version: 1.0.0

Base URL: `https://api.platform.com/v1`

Authentication: Bearer Token

Content-Type: `application/json`

API Overview

The AI Onboarding API provides intelligent, real-time analysis and personalization for user onboarding flows. It supports session management, step-by-step response processing, AI-powered recommendations, and completion tracking.

Core Capabilities

- **Session Management** - Create, resume, and track onboarding sessions
 - **AI Analysis** - Real-time response analysis and personalized recommendations
 - **Progress Tracking** - Step completion and user journey analytics
 - **Subscription Integration** - Tier-based feature gating and upgrade flows
 - **Demo Mode** - Investor presentation and demo capabilities
-

Authentication

Bearer Token Authentication

Plain Text

```
Authorization: Bearer {access_token}
```

API Key Authentication (Demo Mode)

Plain Text

```
X-API-Key: {api_key}
```

```
X-Demo-Mode: true
```



Session Management

Initialize Onboarding Session

POST /onboarding/initialize

Creates a new onboarding session for a user.

Request Body:

JSON

```
{
  "userId": "user_12345",
  "isDemo": false,
  "subscriptionTier": "basic",
  "metadata": {
    "source": "dashboard",
    "referrer": "organic",
    "userAgent": "Mozilla/5.0..."
  }
}
```

Response:

JSON

```
{
  "success": true,
  "data": {
    "sessionId": "session_67890",
    "userId": "user_12345",
    "currentStep": 0,
    "totalSteps": 9,
    "isDemo": false,
    "subscriptionTier": "basic",
    "createdAt": "2024-12-28T10:30:00Z",
    "expiresAt": "2024-12-28T22:30:00Z"
  }
}
```

Error Responses:

JSON

```
{
  "success": false,
  "error": {
    "code": "INVALID_USER",
    "message": "User not found or inactive",
    "details": {}
  }
}
```

Get Session Details

GET `/onboarding/session/{sessionId}`

Retrieves current session state and progress.

Response:

JSON

```
{
  "success": true,
  "data": {
```

```
"sessionId": "session_67890",
"userId": "user_12345",
"currentStep": 3,
"totalSteps": 9,
"completedSteps": [0, 1, 2],
"responses": {
  "experience": "intermediate",
  "risk_tolerance": "moderate",
  "investment_goals": ["growth", "learning"]
},
"aiInsights": {
  "profileStrength": 0.85,
  "recommendationConfidence": 0.92,
  "riskAlignment": "excellent"
},
"progress": {
  "completionPercentage": 33,
  "estimatedTimeRemaining": 420,
  "averageStepTime": 45
}
}
```

Step Response Processing

Submit Step Response

POST /onboarding/session/{sessionId}/response

Processes user response for a specific step with AI analysis.

Request Body:

JSON

```
{
  "stepId": "risk_tolerance",
  "stepIndex": 2,
  "data": {
    "risk_level": "moderate",
    "position_size_preference": 10,
    "volatility_comfort": "medium",
```

```
    "loss_tolerance": 15
  },
  "metadata": {
    "timeSpent": 45000,
    "interactionCount": 3,
    "hesitationPoints": ["volatility_comfort"]
  }
}
```

Response:

JSON

```
{
  "success": true,
  "data": {
    "stepId": "risk_tolerance",
    "processed": true,
    "aiAnalysis": {
      "confidence": 0.88,
      "insights": [
        "Risk tolerance aligns well with intermediate experience level",
        "Position sizing preference indicates good risk awareness"
      ],
      "recommendations": [
        {
          "type": "strategy_filter",
          "message": "Based on your risk profile, I'll focus on strategies with 8-12% maximum drawdown",
          "data": {
            "maxDrawdown": 12,
            "riskCategories": ["low", "medium"]
          }
        }
      ],
      "warnings": [],
      "nextStepOptimizations": {
        "investment_goals": {
          "emphasize": ["growth", "income"],
          "deemphasize": ["speculation"]
        }
      }
    },
  },
  "progress": {
    "currentStep": 3,
    "completionPercentage": 33,
    "nextStep": "investment_goals"
  }
}
```

```
}  
}  
}
```

Advance to Next Step

POST /onboarding/session/{sessionId}/next

Advances session to the next step with AI-optimized content.

Request Body:

JSON

```
{  
  "currentStepId": "risk_tolerance",  
  "direction": "forward"  
}
```

Response:

JSON

```
{  
  "success": true,  
  "data": {  
    "nextStep": {  
      "stepId": "investment_goals",  
      "stepIndex": 3,  
      "title": "Investment Goals",  
      "description": "Select your primary investment objectives",  
      "aiOptimizations": {  
        "recommendedGoals": ["growth", "income"],  
        "personalizedMessage": "Based on your moderate risk tolerance, these  
goals align well with your profile",  
        "goalDescriptions": {  
          "growth": "Capital appreciation through strategic investments -  
matches your risk profile perfectly",  
          "income": "Regular income generation - complements your moderate  
approach"  
        }  
      }  
    }  
  }  
}
```

```
    },
    "progress": {
      "currentStep": 3,
      "completionPercentage": 33,
      "stepsRemaining": 6
    }
  }
}
```

AI Recommendations

Get Personalized Recommendations

GET /onboarding/session/{sessionId}/recommendations

Retrieves AI-powered recommendations based on current user profile.

Query Parameters:

- `category` - Filter by recommendation type (strategies, platforms, goals)
- `limit` - Maximum number of recommendations (default: 10)

Response:

JSON

```
{
  "success": true,
  "data": {
    "recommendations": [
      {
        "id": "rec_001",
        "type": "strategy",
        "category": "trend_following",
        "title": "Moving Average Trend Following",
        "confidence": 0.92,
        "reasoning": "Excellent match for your intermediate experience and moderate risk tolerance",
        "data": {
          "strategyId": "trend_following_ma",
          "expectedReturn": "12-18%",

```

```
        "maxDrawdown": "8-12%",
        "complexity": "intermediate",
        "timeCommitment": "30-60 min/day"
    },
    "aiInsights": {
        "profileAlignment": "excellent",
        "riskMatch": "perfect",
        "experienceMatch": "good",
        "goalAlignment": "high"
    }
}
],
"meta": {
    "totalRecommendations": 6,
    "averageConfidence": 0.87,
    "profileCompleteness": 0.75
}
}
```

Analyze Response Compatibility

POST /onboarding/analyze/compatibility

Analyzes compatibility between user responses and potential selections.

Request Body:

JSON

```
{
  "userProfile": {
    "experience": "beginner",
    "risk_tolerance": "conservative",
    "investment_goals": ["learning", "income"]
  },
  "targetSelection": {
    "type": "strategy",
    "id": "momentum_breakout",
    "metadata": {
      "difficulty": "advanced",
      "riskLevel": "high",
      "timeCommitment": "high"
    }
  }
}
```



```
}  
}
```

Response:

JSON

```
{  
  "success": true,  
  "data": {  
    "compatibility": {  
      "overall": "poor",  
      "score": 0.25,  
      "factors": {  
        "experience": {  
          "match": "poor",  
          "score": 0.1,  
          "reason": "Advanced strategy not suitable for beginner level"  
        },  
        "risk": {  
          "match": "poor",  
          "score": 0.2,  
          "reason": "High-risk strategy conflicts with conservative  
tolerance"  
        },  
        "goals": {  
          "match": "fair",  
          "score": 0.4,  
          "reason": "Strategy can provide learning opportunities"  
        }  
      }  
    },  
    "recommendations": {  
      "action": "suggest_alternative",  
      "message": "This strategy may be too advanced for your current  
experience level. Consider starting with trend-following strategies.",  
      "alternatives": [  
        {  
          "id": "trend_following_ma",  
          "title": "Moving Average Trend Following",  
          "compatibility": 0.88  
        }  
      ]  
    }  
  }  
}
```



Strategy Management

Get Available Strategies

GET /onboarding/strategies

Retrieves available trading strategies with filtering options.

Query Parameters:

- `tier` - Filter by subscription tier (basic, professional, enterprise)
- `difficulty` - Filter by difficulty level (beginner, intermediate, advanced, expert)
- `risk_level` - Filter by risk level (low, medium, high)
- `category` - Filter by strategy category

Response:

JSON

```
{
  "success": true,
  "data": {
    "strategies": [
      {
        "id": "trend_following_ma",
        "name": "Moving Average Trend Following",
        "category": "trend_following",
        "description": "Follow market trends using moving average crossovers",
        "difficulty": "beginner",
        "riskLevel": "medium",
        "requiredTier": "basic",
        "performance": {
          "expectedReturn": "12-18%",
          "maxDrawdown": "8-12%",
          "winRate": "65%",
          "sharpeRatio": 1.4
        },
        "features": [
          "Simple moving average signals",

```

```
    "Trend confirmation filters",
    "Risk management rules",
    "Backtesting included"
  ],
  "aiFeatures": [
    "Auto trend detection",
    "Dynamic stop losses",
    "Market regime analysis",
    "Signal confidence scoring"
  ],
  "platforms": ["tradingview", "metatrader"],
  "timeframes": ["1h", "4h", "1d"]
}
],
"meta": {
  "totalStrategies": 6,
  "availableForTier": 2,
  "categories": ["trend_following", "mean_reversion", "momentum",
"income", "options", "arbitrage"]
}
}
```

Platform Integration

Get Supported Platforms

GET /onboarding/platforms

Retrieves available trading platforms with integration details.

Response:

JSON

```
{
  "success": true,
  "data": {
    "platforms": [
      {
        "id": "tradingview",
        "name": "TradingView",
```

```
    "description": "Advanced charting platform with social trading
features",
    "requiredTier": "basic",
    "integrationLevel": "full",
    "dataLatency": "< 100ms",
    "supportedMarkets": ["stocks", "forex", "crypto", "futures",
"options"],
    "features": [
        "Advanced charting tools",
        "Social trading community",
        "Custom indicators",
        "Real-time market data"
    ],
    "aiIntegration": [
        "Chart pattern recognition",
        "Social sentiment analysis",
        "Custom indicator signals"
    ],
    "connectionStatus": "available",
    "setupComplexity": "easy"
  }
]
}
}
```

✓ Completion & Summary

Complete Onboarding

POST /onboarding/session/{sessionId}/complete

Finalizes the onboarding process and activates user profile.

Request Body:

JSON

```
{
  "finalReview": true,
  "acceptTerms": true,
  "activateProfile": true,
```

```
"enableNotifications": true
}
```

Response:

JSON

```
{
  "success": true,
  "data": {
    "completionId": "completion_12345",
    "sessionId": "session_67890",
    "userId": "user_12345",
    "completedAt": "2024-12-28T11:15:00Z",
    "totalTime": 2700,
    "profile": {
      "experience": "intermediate",
      "riskTolerance": "moderate",
      "goals": ["growth", "learning"],
      "tradingStyle": "swing_trading",
      "platforms": ["tradingview", "metatrader"],
      "strategies": ["trend_following_ma", "mean_reversion_rsi"],
      "aiPersonality": "balanced",
      "communicationStyle": "detailed"
    },
    "activations": {
      "aiAssistant": true,
      "platformIntegrations": ["tradingview"],
      "strategies": ["trend_following_ma", "mean_reversion_rsi"],
      "notifications": true,
      "welcomeBonus": {
        "type": "premium_trial",
        "duration": "7_days",
        "features": ["all_strategies", "advanced_alerts", "priority_support"]
      }
    },
    "nextSteps": [
      {
        "action": "connect_platform",
        "title": "Connect TradingView",
        "description": "Link your TradingView account for real-time analysis",
        "priority": "high"
      },
      {
        "action": "review_strategies",
        "title": "Review Your Strategies",

```

```
    "description": "Explore your personalized trading strategies",
    "priority": "medium"
  }
]
}
}
```

Get Onboarding Summary

GET /onboarding/session/{sessionId}/summary

Retrieves comprehensive onboarding summary and analytics.

Response:

JSON

```
{
  "success": true,
  "data": {
    "summary": {
      "sessionId": "session_67890",
      "userId": "user_12345",
      "completedAt": "2024-12-28T11:15:00Z",
      "totalTime": 2700,
      "stepsCompleted": 9,
      "completionRate": 100
    },
    "profile": {
      "experience": "intermediate",
      "riskTolerance": "moderate",
      "goals": ["growth", "learning"],
      "tradingStyle": "swing_trading",
      "platforms": ["tradingview", "metatrader"],
      "strategies": ["trend_following_ma", "mean_reversion_rsi"],
      "aiPersonality": "balanced"
    },
    "analytics": {
      "stepTimes": [30, 45, 60, 40, 55, 50, 65, 70, 45],
      "hesitationPoints": ["risk_tolerance", "strategy_selection"],
      "aiConfidence": 0.89,
      "profileStrength": 0.92,
      "recommendationAccuracy": 0.85
    }
  },
}
```

```
"activations": {
  "aiAssistant": true,
  "strategies": 2,
  "platforms": 2,
  "welcomeBonus": "7_day_premium_trial"
}
}
```

Demo Mode API

Initialize Demo Session

POST /onboarding/demo/initialize

Creates a demo session with pre-filled responses for presentations.

Request Body:

JSON

```
{
  "demoType": "investor_presentation",
  "scenario": "advanced_trader",
  "autoAdvance": true,
  "stepDelay": 2000
}
```

Response:

JSON

```
{
  "success": true,
  "data": {
    "demoSessionId": "demo_session_123",
    "demoType": "investor_presentation",
    "prefilledResponses": {
      "experience": "advanced",
      "risk_tolerance": "aggressive",
      "investment_goals": ["growth", "speculation"],
    }
  }
}
```

```
    "trading_style": "day_trading",
    "platform_preferences": ["tradingview", "metatrader"],
    "selected_strategies": ["momentum_breakout", "mean_reversion_rsi"]
  },
  "settings": {
    "autoAdvance": true,
    "stepDelay": 2000,
    "showDemoBanner": true,
    "disableSubmissions": true
  }
}
```



Analytics & Tracking

Track Onboarding Event

POST /onboarding/analytics/track

Records user interaction events for analytics.

Request Body:

JSON

```
{
  "sessionId": "session_67890",
  "event": "step_completed",
  "data": {
    "stepId": "risk_tolerance",
    "stepIndex": 2,
    "timeSpent": 45000,
    "interactionCount": 3,
    "hesitationPoints": ["volatility_comfort"],
    "finalSelection": "moderate"
  },
  "metadata": {
    "userAgent": "Mozilla/5.0...",
    "viewport": "1920x1080",
    "device": "desktop"
  }
}
```



```
}  
}
```

Response:

JSON

```
{  
  "success": true,  
  "data": {  
    "eventId": "event_789",  
    "tracked": true,  
    "timestamp": "2024-12-28T10:45:00Z"  
  }  
}
```

Error Handling

Error Response Format

JSON

```
{  
  "success": false,  
  "error": {  
    "code": "ERROR_CODE",  
    "message": "Human-readable error message",  
    "details": {  
      "field": "specific_field",  
      "value": "invalid_value",  
      "expected": "expected_format"  
    },  
    "timestamp": "2024-12-28T10:30:00Z",  
    "requestId": "req_12345"  
  }  
}
```

Common Error Codes

- INVALID_SESSION - Session not found or expired

- `INVALID_STEP` - Step ID or index is invalid
 - `VALIDATION_ERROR` - Request data validation failed
 - `UNAUTHORIZED` - Authentication required or invalid
 - `RATE_LIMIT_EXCEEDED` - Too many requests
 - `INTERNAL_ERROR` - Server-side error occurred
-



Rate Limiting

Rate Limits

- **General API:** 100 requests per minute per user
- **AI Analysis:** 20 requests per minute per user
- **Demo Mode:** 200 requests per minute (higher limit for presentations)

Rate Limit Headers

Plain Text

```
X-RateLimit-Limit: 100
X-RateLimit-Remaining: 95
X-RateLimit-Reset: 1640707200
```



Testing & Development

Sandbox Environment

Base URL: `https://api-sandbox.platform.com/v1`

Test Data

JSON

```
{
  "testUserId": "test_user_123",
  "testSessionId": "test_session_456",
  "demoApiKey": "demo_key_789"
}
```

Webhook Testing

Bash

```
# Test webhook endpoint
curl -X POST https://your-app.com/webhooks/onboarding \
  -H "Content-Type: application/json" \
  -d '{
    "event": "onboarding_completed",
    "sessionId": "session_67890",
    "userId": "user_12345",
    "timestamp": "2024-12-28T11:15:00Z"
  }'
```

SDK & Libraries

JavaScript SDK

JavaScript

```
import { OnboardingAPI } from '@platform/onboarding-sdk';

const api = new OnboardingAPI({
  apiKey: 'your_api_key',
  baseUrl: 'https://api.platform.com/v1'
});

// Initialize session
const session = await api.initializeSession({
  userId: 'user_123',
  isDemo: false
});
```

```
// Submit response
const result = await api.submitResponse(session.sessionId, {
  stepId: 'experience',
  data: { experience: 'intermediate' }
});
```


React Hooks

JavaScript

```
import { useOnboardingSession } from '@platform/react-onboarding';

function OnboardingWizard() {
  const {
    session,
    currentStep,
    submitResponse,
    nextStep,
    isLoading
  } = useOnboardingSession('user_123');

  return (
    <div>
      { /* Wizard implementation */ }
    </div>
  );
}
```

 This API provides the complete backend infrastructure for the most advanced AI-powered onboarding system in fintech, enabling real-time personalization and intelligent user guidance! 