

Chess with Mom

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I. Functional Requirements

I.A. Use Cases

I.A.1. User Authentication

Actors	User, Admin
Description	The user (mom) or the son (admin) logs in using a phone number
Steps	<ol style="list-style-type: none">1. Enter phone number2. Receive pass key via SMS3. Enter pass key to authenticate4. (Session is tokenized for 1 week)
Admin Functions	<ul style="list-style-type: none">- Manage allowed phone numbers- Reset login sessions

I.A.2. Play Chess

Actors	User, Admin
Description	Play a live game of chess against each other
Steps	<ol style="list-style-type: none">1. Login2. One user sends a game request3. Other user accepts the game request4. Move pieces on a virtual board5. End the game with checkmate, draw, or resignation
Admin Functions	<ul style="list-style-type: none">- Undo moves

I.A.3. Solve Chess Puzzles

Actors	User
Description	Play a chess puzzle from a predefined position
Steps	<ol style="list-style-type: none">1. Login2. Select 'Puzzles' button from sidebar3. Random puzzle is generated4. Take the correct sequence of moves to solve the puzzle5. Receive feedback on success or failure
Admin Functions	<ul style="list-style-type: none">- None

I.A.4. Create Chess Puzzles

Actors	Admin
Description	Add new puzzles to the existing database
Steps	<ol style="list-style-type: none">1. Login as admin2. Select 'Puzzles' button from the sidebar3. Select 'Create' button (available to admin only)4. Configure the starting position of the puzzle5. Configure the correct move sequence to successfully complete the puzzle
Admin Functions	<ul style="list-style-type: none">- Create, Delete, Update puzzles

I.A.5. Review Past Games

Actors	User, Admin
Description	Access and analyze previous games played
Steps	<ol style="list-style-type: none">1. Login2. Select 'Review' button from the sidebar3. Select a game from the list4. Toggle through the moves played
Admin Functions	<ul style="list-style-type: none">- Delete games from history

I.A.6. Game Management

Actors	Admin
Description	Manage active or past games
Steps	<ol style="list-style-type: none">1. Login as admin2. End an active game3. Select 'Review' button from the sidebar4. Delete past games
Admin Functions	<ul style="list-style-type: none">- Terminate malfunctioning sessions- Remove games from history

I.A.7. System Logging

Actors	Admin
Description	Access logs for debugging
Steps	<ol style="list-style-type: none">1. Login to AWS2. Navigate to CloudWatch service3. Review authentication logs

	4. Review game and puzzle activity logs
Admin Functions	<ul style="list-style-type: none">- Check for malicious login attempts- Review logs for debugging