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Java Manual

**Bug Report**

* When displaying end of round information, player and computer scores are switched.
* When asking for help, Assessment will not consider loose cards that can be captured.
* Did not implement multiple values (1, 14) for aces. Only have a value of 1.

**Feature Report**

* Implemented a semi advanced AI system which works off of a max heap structure. Before the AI makes a move, a tree structured is formed where each level is all possible moves that can be made with a single card in the hand. New levels are made until the hand size is 0, from there. The best option is determined by checking the best weights from every node in that level, from there that node parent is backtracked to the next level. This processes happens until the best node from that path down the tree is given to the root as the best option for the current turn. At each level, the state of the table is copied into a new table object and each move is made. This allows the AI to full play out its hand and keep actions persistent through each depth of the heap. Although this method of move assessment is not ideal because it does not take into account the other players actions, it does however provide better move options than just checking the best move for the current turn.

**Data Structures and Class Composition**

Class: MainActivity extends FragmentActivity

- No collections or inheritance

- Handles loading of serial data from a file located within the public file system.

Is the anchor point for the application, when the tournament is over the game defaults back to this activity, along with when the game is saved.

Class: GameAcitivity extends Fragment Activity

- mLooseCards (Vector<CardModel>)

-mBuilds (Vector<BuildModel>)

Handles initialization of the view by loading fragments, creates tournament

Instance, and implements an onChange listener for when a round is over.

Class: ComputerPileFragment extends Fragment

-No collections

Class: DeckButtonFragment extends Fragment

-No collections

Class: HandFragment extends Fragment

-No collections

Class LoadGameButton extends Fragment

-No collections

Class MakeMoveFragment extends Fragment

-No collections

Class PlayButtonFragment extends Fragment

-No collections

Class LogButtonFragment extends Fragment

-No collections

Class PlayerPileFragment extends Fragment

-No collections

Class SaveGameButtonFragment extends Fragment

-No collections

Class: BooleanVariable

-Interface onChange

Class: Serialization

-Vector<CardModel> mDeck

-Vector <CardModel> mLooseCards

-Vector<BasePlayerModel> mPlayers

-Vector<BuildModel> mBuilds

Class BuildOnClickListener implements View.OnClickListener

-no containers

Class: ComputerPileOnClickListener implements View.OnClickListener

-no containers

Class: DeckOnClickListener implements View.OnClickListener

-no containers

Class HelpOnClickListener implements View.OnClickListener

-no containers

Class: HumanPileOnClickListener implements View.OnClickListener

-no containers

Class: LoadGameOnClickListener implements View.OnClickListener

-no containers

Class: LooseCardOnClickListener implements View.OnClickListener

Class: MakeMoveButtonClickListener implements View.OnClickListener

-no containers

-mRadioButtonGroup

Class: PlayButtonClickListener implements View.OnClickListener

-no containers

Class: SaveButtonClickListener implements View.OnClickListener

-no containers

Class: TurnLogOnClickListener implements View.OnClickListener

-no containers

Class BasePlayerModel

-Vector<CardModel mHand

-Vector<CardModel> mPile

Class: BuildModel

-Vector<Vector<CardModel>> msets

Class: CardModel

-no containers

Class: ComputerPlayerModel extends BasePlayerModel

-all containers inherited from BasePlayerModel

Class: DeckModel

-no containers

Class; HumanPlayerModel extends BasePlayerModel

-All containers inherited from BasePlayerModel

Class: RoundModel

-Vector<BasePlayerModel> mPlayers (reference from TournamentModel).

Class: TableModel

-Vector<CardModel> mLooseCards

-Vector<BuildModel> mBuilds

Class: TournamentModel

-Vector<PlayerModel> mPlayer

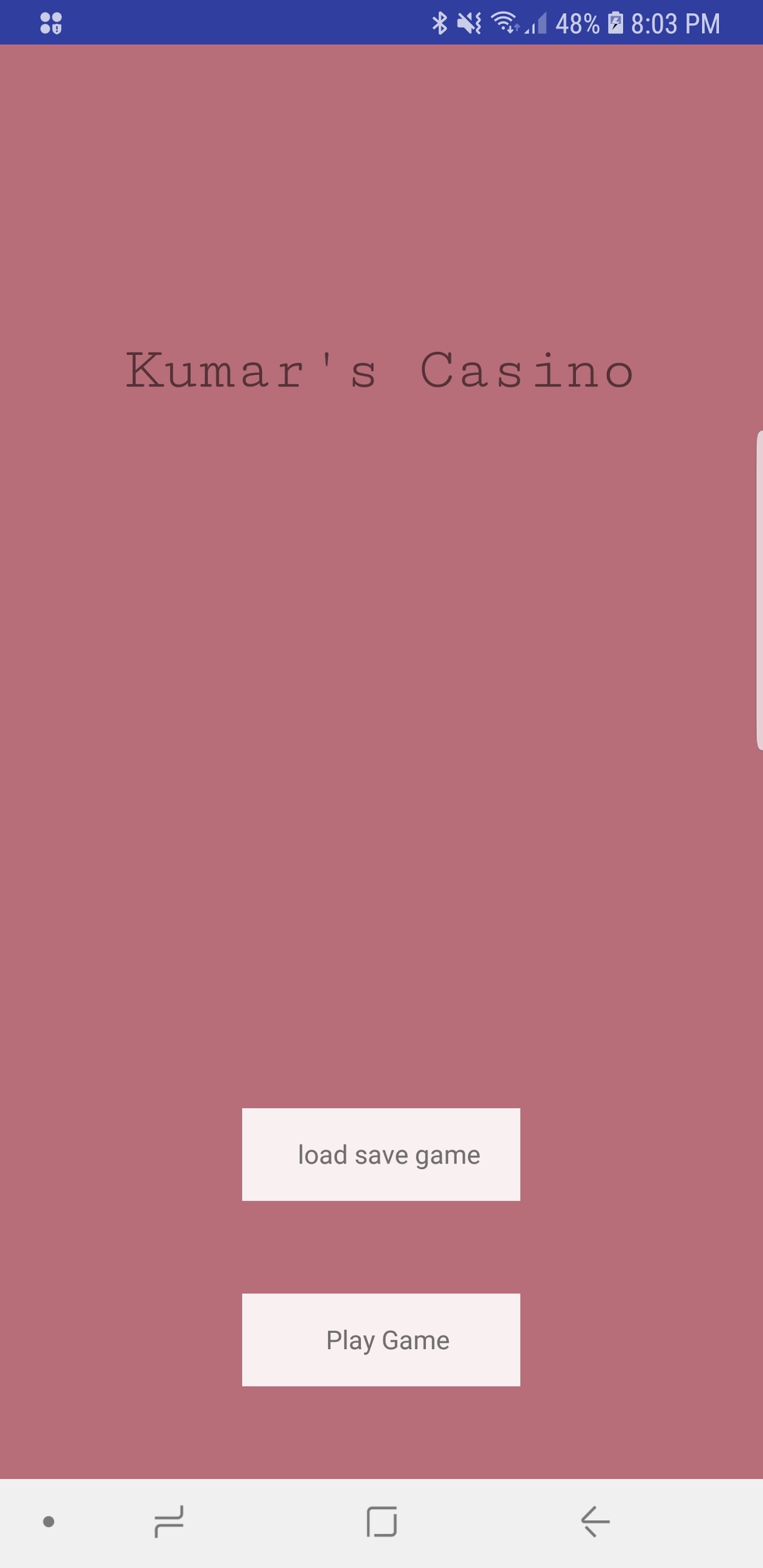
-Vector<RoundModel> mRounds

Class: TurnLogModel

-Vector<String> mLog

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**Screen Shots:**

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