# Project Summary

*Short summary of the project setting.*

# Propositions

*List of the propositions used in the model, and their (English) interpretation.*

player\_a\_b: player have a card with “a” rank and “b” suit

player\_run\_x: player has a run of 3 or more consecutive cards of the same suit, x = a list of cards, eg. [player\_1\_A, player\_2\_A, player\_3\_A].

player\_set\_x: is considered true if the player has a set of 3 or 4 cards of the same rank x = a list of cards, eg. [player\_1\_A, player\_1\_B, player\_1\_C].

pl\_want\_a\_b: is considered true if player wants a card with “a” rank and “b” suit, that means the card could make into a meld

opp\_a\_b: opponent has a card with “a” rank and “b” suit

opp\_pick\_a\_b: opponent picks the card from the discarding pile

opp\_discard\_a\_b: opponent discards a card with “a” rank and “b” suit

# Constraints

*List of constraint types used in the model and their (English) interpretation. You only need to provide one example for each constraint type: e.g., if you have constraints saying “cars have one colour assigned” in a car configuration setting, then you only need to show the constraints for a single car. Essentially, we want to see the pattern for all of the types of constraints, and not every constraint enumerated.*

player\_a\_b opp\_a\_b: if player have card with “a” rank and “b” suit, then opponent does not the same card

player\_a\_b player\_a\_b player\_a\_b ……………… player\_run\_x

(player\_a\_b player\_a\_b player\_a\_b)(player\_a\_b player\_a\_b player\_a\_b)………….. player\_set\_x

opp\_pick\_a\_b

opp\_discard\_a\_b

player\_a\_b opp\_a\_b in the deck that’s gonna show up soon ---------?

# Model Exploration

*List all the ways that you have explored your model – not only the final version, but intermediate versions as well. See (C3) in the project description for ideas.*

# Jape Proof Ideas

*List the ideas you have to build sequents & proofs that relate to your project.*

# Requested Feedback

*Provide 2-3 questions you’d like the TA’s and other students to comment on.*

# First-Order Extension

*Describe how you might extend your model to a predicate logic setting, including how both the propositions and constraints would be updated.* ***There is no need to implement this extension!***

# Useful Notation

*Feel free to copy/paste the symbols here and remove this section before submitting.*