

Constraints (Rules)

Gorilla Constraints

- Gorillas can't be visited ____ times in a ____ (this rule might follow a different structure like “__ times in a row”)
 - Gorillas in other countries can't be visited
 - Gorillas being researched can't be visited
 - ____ number of gorilla families must be kept in reserve in case a chosen gorilla family is no longer visitable in the morning
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Guide Constraints

- The guide must be on duty on the current day
 - Guides can't visit the same gorilla ____ times in a ____
 - Rotate the guide's difficulty of hikes (How would you like this done?)
 - 1 or 2 guides per group
 - Woman guide if requested (can you find women porters at every hike entrance?)
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Group Constraints

- Max 8 people per group
- Groups can get split up across days, but families must stick together
- Groups can't see the same gorilla family twice

- Can't have a hike that is too difficult

Data (Collected Information)



Gorilla Families

- Last location
- Elevation
- Routes
- Hike steepness rating
- Hike time estimate
- Hike rockiness
- Muddyness
- Overall difficulty rating
- Country
- Research
- List of last visits



Families

- Number of family members
 - Names of family members
 - Emails
 - Phone numbers
 - Hotel
 - Nationality
 - Medical conditions
 - Steepness preference
 - Length preference
 - Difficulty preference
 - Number of porters
 - Leave by time
 - Special restriction requests
 - List of past gorilla visits (left blank if it's their first hike)
 - Satisfaction with past hike (left blank if it's their first hike)
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Guides

- Name
- Gender
- Work schedule

- Last __ hike difficulty ratings (decide how many to look at)
 - Last __ gorilla families visited (decide how many to look at)
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Results

For each human family, the model will choose:

- 1 or 2 guides
- 1 gorilla family
- 1 specific path

Such that:

- All of our rules are followed
- The hike matches the group's request as closely as possible