

# CS 2310 Homework 1

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- a. IC cards to specify the activities involved in organizing a picnic:


**Solution:**

There are lots of things to organize a picnic. Here, I assume that I am the organizer and my friends will take part in. I use friend one, friend two...instead of name to present the name of other IC.

Firstly, I start with a purple card which includes many complex actions. Then I use other IC cards to decompose the complex tasks.

<b>IC Card</b>	IC Name: Organizing a picnic
Description: Organize a Picnic	
Interaction Pattern:	
	
Mixed	
My Task: Mainly responsible for organizing a picnic	
Time Critical Condition: Before the picnic date	
Name of Other IC: Friends	
Message to Other IC: Ask others to help organizing the picnic	
Other IC's Task: Different lots of tasks	
Card 1 of 1 (If necessary please use several IC cards to describe an IC)	

- Pick up a date for picnic:

<b>IC Card</b>	IC Name: Pick up a date
Description: decide a day for the picnic	
Interaction Pattern:	
	
By Myself with Interaction	
My Task: Choose a day for picnic	
Time Critical Condition: $T_1=T_2= \dots=T_n$ ( $T_i$ represents everyone's time)	
Name of Other IC: Friends	
Message to Other IC: tell me which day is ok for everyone	
Other IC's Task: None	
Card 1 of 1 (If necessary please use several IC cards to describe an IC)	

- Pick up a place for picnic:

**IC Card**

IC Name: Choose a Place

Description: Pick up a location for picnic

Interaction Pattern:



By Myself no Interaction

My Task: determine a perfect place for picnic

Time Critical Condition: None

Name of Other IC: None

Message to Other IC: None

Other IC's Task: None

Card 1 of 1 (If necessary please use several IC cards to describe an IC)

- Arrange the food: this activity includes a bunch of sub-activities. Thus I use three IC cards to specify it.

**IC Card**

IC Name: Get Snacks

Description: Get some snacks for picnic

Interaction Pattern:



By Others with Interaction

My Task: None

Time Critical Condition: Before the picnic date

Name of Other IC: Friend one

Message to Other IC: Ask friend one to buy some snacks

Other IC's Task: Buy and bring snacks to picnic

Card 1 of 3 (If necessary please use several IC cards to describe an IC)

**IC Card**

IC Name: Get some drinks

Description: Get some drinks for picnic

Interaction Pattern:



By Others with Interaction

My Task: None

Time Critical Condition: Before the picnic date

Name of Other IC: Friend two

Message to Other IC: Ask friend two to buy some drinks

Other IC's Task: Buy and bring drinks to picnic

Card 2 of 3 (If necessary please use several IC cards to describe an IC)

**IC Card**

IC Name: Get\_Food

Description: Get some food for picnic

Interaction Pattern:



By Others with Interaction

My Task: None

Time Critical Condition: Before the picnic date

Name of Other IC: Friend three

Message to Other IC: Ask friend three to buy some real food, not snacks

Other IC's Task: Buy and bring food to picnic

Card 3 of 3 (If necessary please use several IC cards to describe an IC)

- Organize the games: Decide which game to play on picnic and Bring the game staffs:

**IC Card**

IC Name: Decide\_games

Description: Pick up some sporting games for picnic

Interaction Pattern:



By Myself with Interaction

My Task: Choose some games for picnic

Time Critical Condition: Before the picnic date

Name of Other IC: Friends

Message to Other IC: ask others which games do they want to play

Other IC's Task: None

Card 1 of 1 (If necessary please use several IC cards to describe an IC)

**IC Card**

IC Name: Bring game staff

Description: Bring the soccer or volleyball to picnic

Interaction Pattern:



By Others with Interaction

My Task: None

Time Critical Condition: On the picnic date

Name of Other IC: Friends

Message to Other IC: Ask friends to bring soccer or volleyball to picnic

Other IC's Task: Bring the gaming staff to picnic

Card 1 of 1 (If necessary please use several IC cards to describe an IC)

- Bring the rain shelter in case it rains on that picnic day:

**IC Card**

IC Name: Bring Pavillion Tent

Description: Bring the pavillion tent for picnic in case it rains

Interaction Pattern:



By Others with Interaction

My Task: None

Time Critical Condition: On the picnic date

Name of Other IC: Friend four

Message to Other IC: Ask friend four to bring the rain shelter to picnic

Other IC's Task: Bring the rain shelter to picnic

Card 1 of 1 (If necessary please use several IC cards to describe an IC)

- Inform all the participants

**IC Card**

IC Name: Inform the Participants

Description: Inform every participants about the time and place of picnic

Interaction Pattern:



By Myself no Interacton

My Task: Inform all the picnic information

Time Critical Condition: Before the picnic date

Name of Other IC: None

Message to Other IC: None

Other IC's Task: None

Card 1 of 1 (If necessary please use several IC cards to describe an IC)

- Arrange the rides to picnic:

**IC Card**

IC Name: Find rides

Description: Find out who doesn't have car

Interaction Pattern:



By Myself with Interaction

My Task: Find out who need rides to picnic

Time Critical Condition: Before the picnic date

Name of Other IC: Friends

Message to Other IC: ask friends whether they need the ride

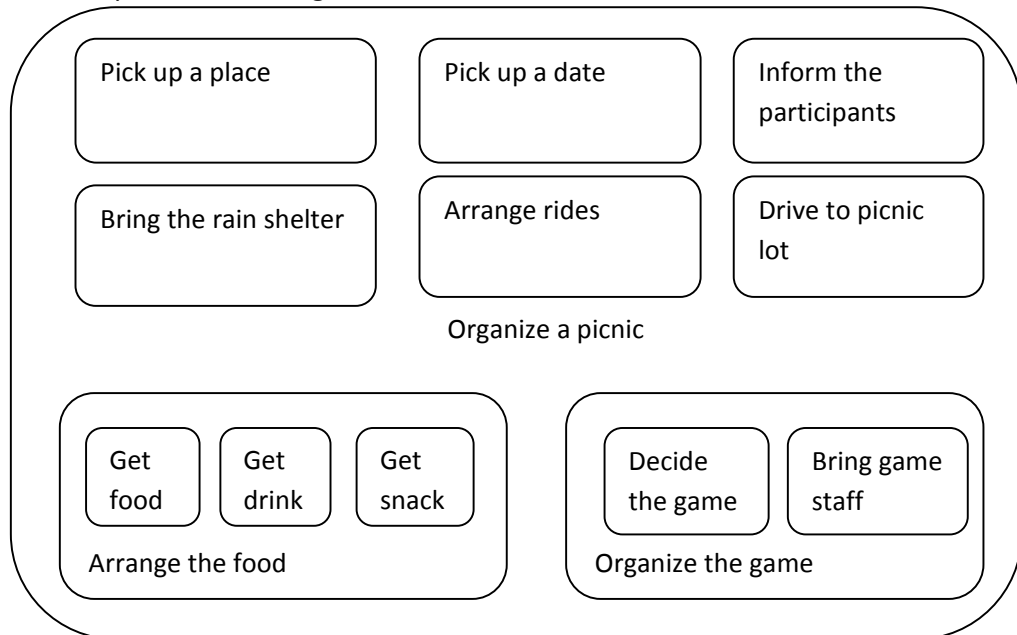
Other IC's Task: None

Card 1 of 1 (If necessary please use several IC cards to describe an IC)

- Drive friends to picnic place:



- Another pattern is the “including” pattern, that is a complex activity contains some simple activities. Big box includes the smaller boxes, like shown below:



- Another pattern is time flowchart, a sequence of boxes, which indicate the time relationship among different activities. In our example of organizing the picnic, nearly all the planning activity is before picnic. Some activity can be overlapped.