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Research work presentation with cards diagram

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ABSTRACT

In this paper, we proposed appropriate diagram to present and converted research work or data into information base of cards is called Cards diagram. It provide meaningful summary and very helpful for researchers/students to decide and define research work in meetings. The concept of a diagram within diagram is being introduced the first time through it. The logic of a conceptual model, modelling language, meta-model and tool also explained with details.

KEYWORDS: Research work, modelling language, meta model and cards diagram

INTRODUCTION

The UML never give us appropriate diagram to present research work. That's why we give idea to create a profile or model base of cards diagram a powerful tool to explain the textual details in a very convenient way, make easy to present and understandable. So our research objectives/tasks are as following:

- What is Cards diagram?
- Why, we are using it?
- Created conceptual model and give logic of modeling language and meta-model of cards diagram.
- Finally claim cards diagram usability in any Tool.

Manually, we will extract data from research paper into information can be used to fill the cards according to the given format. Also give a necessary example. This analysis or evaluation will give us the answer that cards diagram is compatibility and suitable for presenting any research work.

LITERATURE REVIEW

A model is a theoretical representation of a structure [6]. In modeling; we are describing and representing all related parts of an area in a defined language. Modeling tools supporting different types of modeling languages [6]. In modeling language specifies the constructing elements from which a model can be made. It corresponds to the concrete syntax is notation/appearance of meta-model elements. In meta-model theoretical description as a rules and elements of a model [6], [7]. It also defines the semantics of the modeling language. It corresponds to the abstract syntax is a concepts which can be used to create models.

CARDS DIAGRAM

We present research work by using an innovative cards diagram is mixture of cards, keys and key-Information. The concepts of cards come from play cards in which selected important cards for playing game same as it. We want pictorial presentation of research data into useful information through different cards. The name of card is a key and information related to it is called key-information present in a comprehensive way show in Figure 2 and 3.

Mostly the teachers give a task to the students for google research papers to make summaries and find out problem statement; if the students will make cards diagrams then they can get right track of research to decide, define and explains meaningful information with minimum time and better understanding of the relationships between all phases develop an active theory generation and clarity of thoughts instead of supporting the concept. We give idea to make a model, modelling language and meta-model of the cards diagram explains next.

Model

The main source is" Dependency Parsing using URDU.KON-TB" as the back-end. While the cards, keys and key-information's as front-end in whole scenario shown in Figure 1. The Modelling language of conceptual model explains next.

Modelling Language

So as an example, we are taking the key- information's manually from "dependency parsing using the URDU.KON-TB" as followings:

- RN: Dependency Parsing using the URDU.KON-TB.
- PS: URDU.KON-TB has not been evaluated in dependency parsing domain.
- RO: They Check phrase structure suitable, measure compatibility and claim it usability in dependency structure domain.
- URW: In URDU.KON-TB, they have to use 1400 sentences bracketing format data with phrase structure. It contains 22 semi-semantic POS, 26 SS-syntactic and 18 functional tagset.
- PW or PT: In conversion, they were defining 7 rules for bracketing format data convert into CoNLL format. They use 6 different feature models, 80% train and 20% test data with 8 experiments do. The conversion usable for small size of Treebank data.
- URT: MaltParser is a data driven dependency parsing base system. It takes CoNLL format data for train and test [1] and [2].

Figure 1: Model of cards diagram

- RM: Computational model is an Urdu Dependency Parsing System.
- CFW: they get 49% accuracy with assumption based enhancement by adding Head information.it mean phrase structure base Treebank using MaltParser without tuning generate into dependency structure.In future work on Head dependent relationship, functional tagset can be marked by dependency grammar rules and enhance it by adding boundary.

Every diagram must have some set of Symbols [3], [4], [5], so this does as well and mentioned in Table 1.

Meta Model

Objects are cards, keys and key-information.the rules are as following:

- We use different borders with different colours or without any colour in cards.
- The size of card depends on the key information mean give short description with bullets and use aligns option.
- Sequences or arrangement of cards depends on research work flow as well as define are RN, PS, RO, URW, PW, EKI, RM and CFW in figure 2.
- One card used two times in diagram if required, see figure 2.
- The Other keys can also be included in it as form of Extra card is using to define extra key- information. Also possible any card wants to skip according to requirements in research see Figure 3.
- The keys are mentioned in the corner of each card top left and bottom right side.
- The concept of using diagram within diagram also available see figure 3.

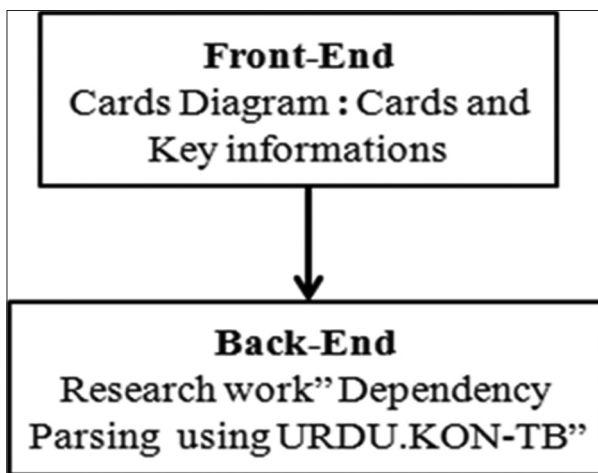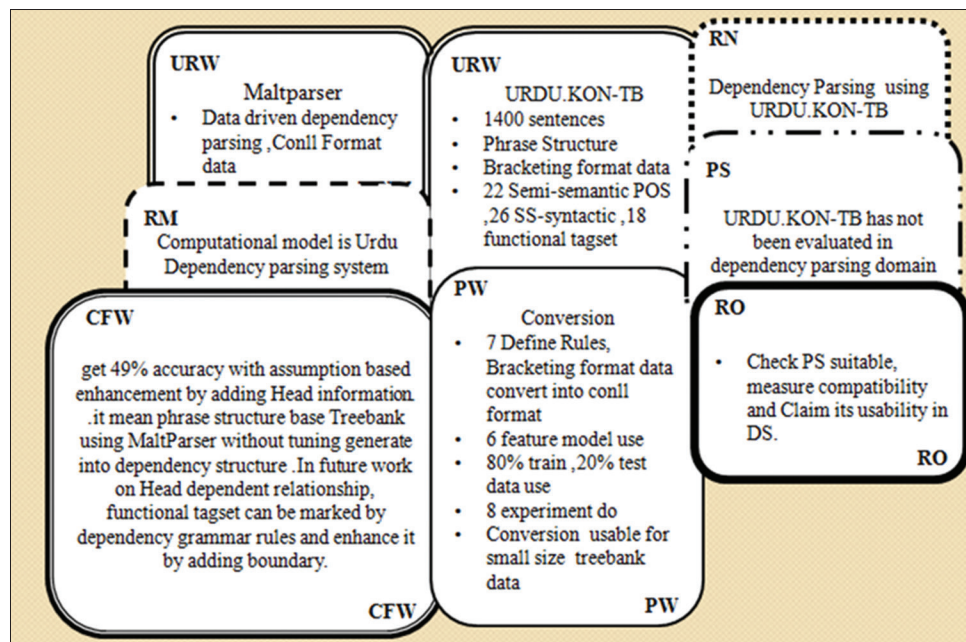Process model see in Figure 2 and 3. The objects and rules are combined.

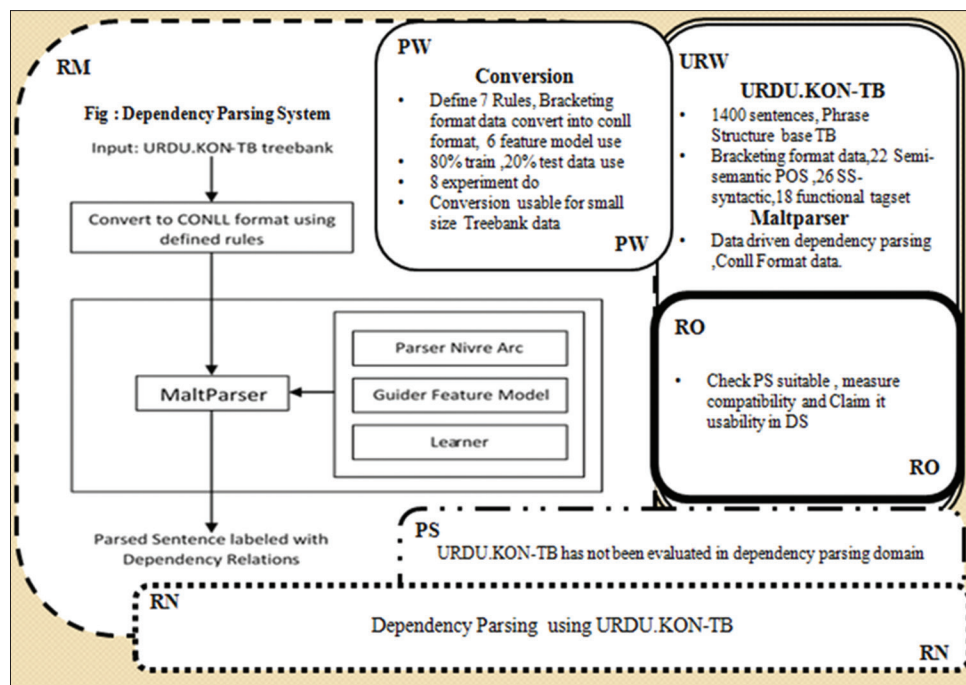**Figure 2:** Cards diagram of "Dependency parsing using the URDU.KON-TB"

Figure 3: The concept of using diagram within cards diagram

Table 1: Symbols of cards Diagram (CsD)

Symbols of key		Key Name	Key Use
(Rounded-Rectangle Dot border symbol)	Rounded-Rectangle Dot border	RN	Research Name
(Rounded-Rectangle Long Dash Dot and dot border symbol)	Rounded-Rectangle Long Dash Dot and dot border	PS	Problem Statement
(Rounded-Rectangle Bold border symbol)	Rounded-Rectangle Bold border	RO	Research Objective /Tasks
(Rounded-Rectangle double border symbol)	Rounded-Rectangle double border	URW or URT	Use Research Work/Tool
(Rounded-Rectangle Solid border symbol)	Rounded-Rectangle Solid border	PW or PT	Propose Work/Tool
(Rounded-Rectangle sample pattern symbol)	Rounded-Rectangle sample pattern	EKI	Extra Key Information
(Rounded-Rectangle Dash border symbol)	Rounded-Rectangle Dash border	RM	Research Methodology/Model
(Rounded-Rectangle Thick thin border symbol)	Rounded-Rectangle Thick thin border	CFW	Conclusion and Future Work

Tool

We used MS-Power point, because it give us variety of different options to draw most appropriate shapes of cards diagram and see real look in figure 2 and 3.

CONCLUSIONS

Domain-specific conceptual model of cards diagram is proposed for research work to present. Diagram format is compatible, usable, suitable, consistence and flexible for presented data into information. Few certain rules were followed to validate the format of our findings.

In future work, we will be used standard tool as a Papyrus or IBM Rational Software architect for draw cards diagram in it.

Also we will do comparison cards diagram with Business process model and notation (BPMN) and class responsibility collaboration (CRC) Cards. Finally, we prove that cards diagram is better and different convenient way provided us.

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