Hyper-G
Specification of Requirements

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Abstract

Hyper-G is the name of an ambitious Hypermedia project[1] currently being developed as a joint effort by a number of institutes of the IIG (Institutes for Information-Processing Graz) of the Technical University of Graz[2] and the Austrian Computer Society.

Study of modern hypermedia systems, information systems, and user interfaces lead to a number of ideas, features, and examples of applications of Hyper-G. They were condensed, put into a logical relationship, and now form a framework of requirements that is contained in this report.

The requirements may also be seen as a description of Hyper-G's features. Care has been taken to isolate requirements from implementation details, design decisions, examples and applications of Hyper-G. For such issues, the reader is referred to e.g. [8, 17, 19] and [20].

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[1] Funding of this project by the Austrian Ministry of Science, grant 613.531/5-26/90, is gratefully acknowledged.

[2] Yes, the 'G' in Hyper-G stands for Graz.

Contents

1 Introduction

The forthcoming sections contain a hierarchy of requirements for Hyper-G. They are structured in five groups: *General Requirements, User-related Requirements, Author-related Requirements, System Requirements* and *Implementation Requirements*. For ease of reference, a unique label is assigned to each requirement in such a way that, if requirement a is refined by requirement b, the label of a is a prefix of the label of b.

2 General Requirements

Req. G.1:	The system should allow access to all kinds of information one can think of (*Multimedia Axiom*).

Let us refine this to a set of more specific requirements:

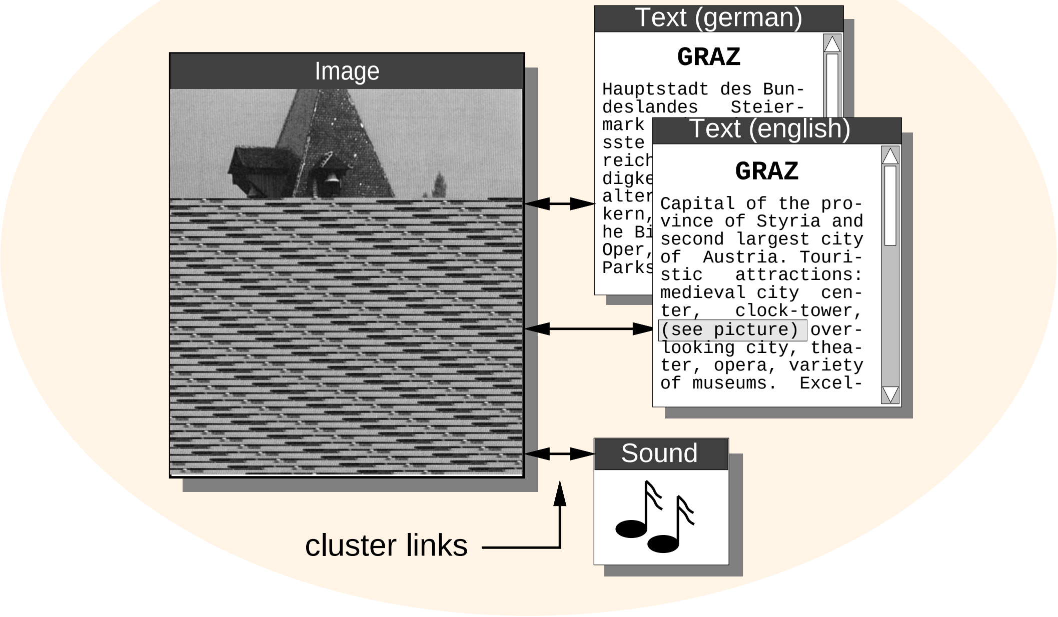
Req. G.1.1:	Information is organized in *documents* of a specific *document type*. Document types include (but are not limited to):
Req. G.1.1.1:	Textual Information
Req. G.1.1.2:	Technical Drawings
Req. G.1.1.3:	Raster Images
Req. G.1.1.4:	Digitized Sound
Req. G.1.1.5:	Digital Movies
Req. G.1.1.6:	Animation
Req. G.1.1.7:	Maps
Req. G.1.1.8:	Electronic Mail, Bulletin Boards, Computer Conferencing
Req. G.1.1.9:	Dialogs (e.g. Menus, Forms)

A system able to handle above document types is generally referred to as a *multimedia system*. To put it simple, above requirements state that Hyper-G is such a multimedia system. Above list is by no means complete; e.g., document types like synthesized voice and music may be added in the future.

Basic Requirement **Req. G.1** introduces the notion of *documents*. These documents can be grouped into so-called *Document Clusters*.

Req. G.1.2:	*Document Clusters* are groups of *documents* that are semantically equivalent or related.

Typical Document Cluster



GRAZ

Hauptstadt des Bundeslandes Steiermark
sste
reich
digke
alter
kern,
he Bi
Oper,
Parks

GRAZ

Capital of the province of Styria and second largest city of Austria. Touristic attractions: medieval city center, clock-tower, (see picture) overlooking city, theater, opera, variety of museums. Excel-