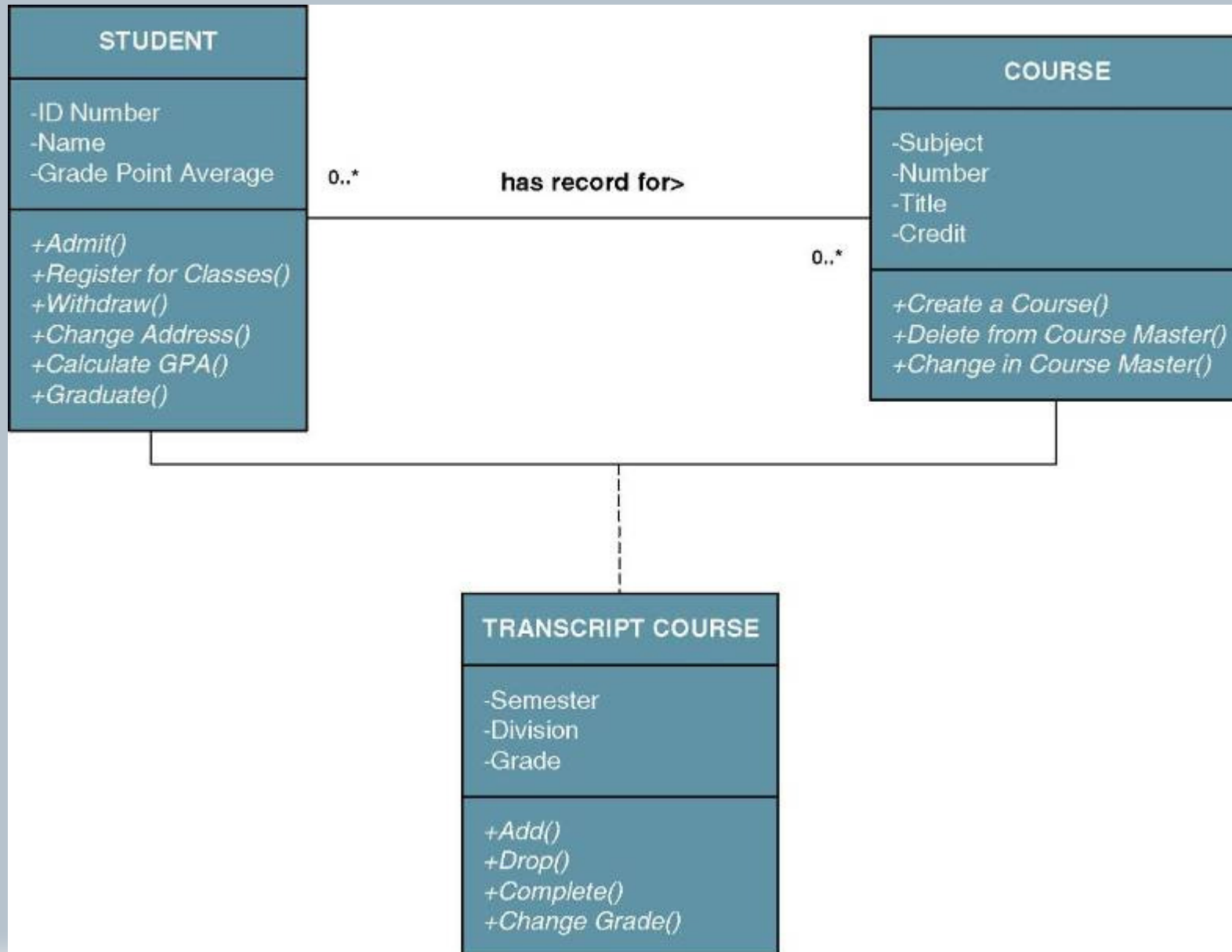


A Simple Object Model



Accelerated Systems Analysis

Accelerated systems analysis – pendekatan yang menekankan pada pembangunan *prototype* untuk lebih mempercepat pengidentifikasian kebutuhan bisnis dan pengguna (*user*) dari sebuah sistem baru

prototype – sebuah skala kecil yang belum lengkap, tetapi mencerminkan sistem yang diharapkan

Discovery Prototyping

Discovery prototyping – teknik yang digunakan untuk mengetahui kebutuhan bisnis pengguna. Caranya dengan mengetahui reaksi mereka saat suatu kebutuhan diimplementasikan segera:

– Keuntungan:

- *Prototype* cenderung pada cara berpikir “saya akan tahu apa yang saya inginkan ketika saya melihatnya“ (*I’ll know what I want when I see it*)

– Kerugian:

- Hasil yang terjadi mungkin prematur, berdasarkan “*look and feel*”
- Mendorong fokus dan komitmen perancangan yang mungkin masih prematur
- Mendorong pengguna percaya bahwa sistem tersebut nantinya juga dapat dibangun dengan cepat seperti prototype-nya.

Rapid Architected Analysis

Rapid architected analysis – pendekatan berdasarkan model dari sistem saat ini atau dari *discovery prototype*.

Requirements Discovery Methods

- **Requirements discovery** – proses analisis sistem yang mengidentifikasi atau menyaring masalah dan kebutuhan solusi sebuah sistem
- Pendekatan ini mencakup:
 - **Fact-finding**
 - **Joint requirements planning**

Requirements Discovery Methods

- **Fact-finding** – proses mengumpulkan informasi tentang masalah sistem, kesempatan, kebutuhan solusi, dan prioritas:
 - *Sampling of existing documentation, reports, forms, databases, etc*
 - *Research of relevant literature*
 - *Observation of the current system*
 - *Questionnaires and surveys*
 - *Interviews*
- **Joint requirements planning (JRP)** – penggunaan *workshop* yang difasilitasi untuk mengumpulkan *system owners, users, dan analysts*, dan beberapa *systems designer and builders* untuk bersama-sama melakukan analisis sistem
 - JRP biasanya merupakan bagian dari metoda yang lebih besar yang disebut *joint application development (JAD)*, sebuah aplikasi yang lebih komprehensif dari teknik JRP untuk proses pengembangan sistem secara keseluruhan.

Business Process Redesign

Business process redesign (BPR) – aplikasi dari metoda analisis sistem dengan tujuan untuk mengubah secara dramatis dan meningkatkan proses bisnis suatu organisasi secara fundamental, tanpa tergantung dari teknologi informasi tertentu

Systems Analysis Methods and Agile Methods

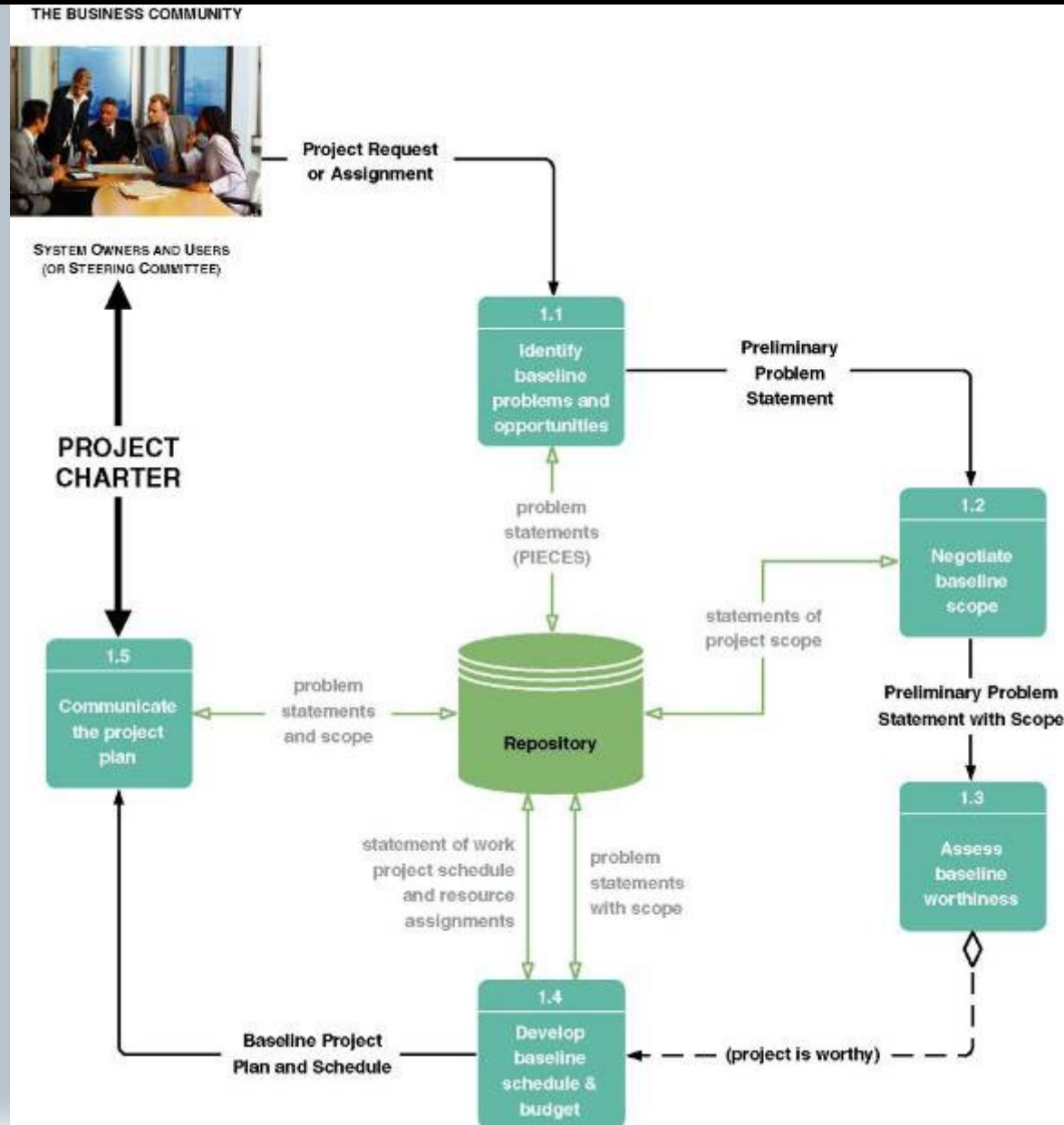
Agile method – integrasi dari pendekatan yang berbeda dari analisis dan perancangan sistem untuk aplikasi yang dianggap sesuai untuk masalah yang akan diselesaikan atau sistem yang dibangun

- Sebagian besar metodologi komersial tidak menggunakan pendekatan tunggal (analisis struktur, IE, OOA)
- Biasanya mereka mengintegrasikan berbagai pendekatan populer dalam satu kumpulan metoda (*agile method*)
- *System developers* diberi fleksibilitas untuk memilih berbagai variasi alat dan teknik untuk menyelesaikan tugasnya.
- Salah satu contoh, metoda *FAST (Framework for the Application of Systems Thinking)*, bekerja dengan cara ini


FAST Systems Analysis Phases

- *Scope Definition Phase*
 - *Is the project worth looking at?*
- *Problem Analysis Phase*
 - *Is a new system worth building?*
- *Requirements Analysis Phase*
 - *What do the users need and want from the new system?*
- *Logical Design Phase*
 - *What must the new system do?*
- *Decision Analysis Phase*
 - *What is the best solution?*

Tasks for the Scope Definition Phase of Systems Analysis



Sample Request for System Services

 SoundStage Entertainment Club <i>Information System Services</i> Phone: 494-0666 Fax: 494-0999 Internet: http://www.soundstage.com Intranet: http://www.soundstage.com/iss		REQUEST FOR INFORMATION SYSTEM SERVICES
DATE OF REQUEST	SERVICE REQUESTED FOR DEPARTMENT(S)	
January 9, 2003	Member Services, Warehouse, Shipping	
SUBMITTED BY (key user contact) Name Sarah Hartman Title Business Analyst, Member Services Office B035 Phone 494-0867		EXECUTIVE SPONSOR (funding authority) Name Galen Kirkhoff Title Vice President, Member Services Office G242 Phone 494-1242
TYPE OF SERVICE REQUESTED: <input type="checkbox"/> Information Strategy Planning <input checked="" type="checkbox"/> Business Process Analysis and Redesign <input checked="" type="checkbox"/> New Application Development <input type="checkbox"/> Other (please specify) _____		
<input type="checkbox"/> Existing Application Enhancement <input type="checkbox"/> Existing Application Maintenance (problem fix) <input type="checkbox"/> Not Sure		
BRIEF STATEMENT OF PROBLEM, OPPORTUNITY, OR DIRECTIVE (attach additional documentation as necessary) The information strategy planning group has targeted member services, marketing, and order fulfillment (inclusive of shipping) for business process redesign and integrated application development. Currently serviced by separate information systems, these areas are not well integrated to maximize efficient order services to our members. The current systems are not adaptable to our rapidly changing products and services. In some cases, separate systems exist for similar products and services. Some of these systems were inherited through mergers that expanded our products and services. There also exist several marketing opportunities to increase our presence to our members. One example includes Internet commerce services. Finally, the automatic identification system being developed for the warehouse must fully interoperate with member services.		
BRIEF STATEMENT OF EXPECTED SOLUTION We envision completely new and streamlined business processes that minimize the response time to member orders for products and services. An order shall not be considered fulfilled until it has been received by the member. The new system should provide for expanded club and member flexibility and adaptability of basic business products and services. We envision a system that extends to the desktop computers of both employees and members, with appropriate shared services provided across the network, consistent with the ISS distributed architecture. This is consistent with strategic plans to retire the AS/400 central computer and replace it with servers.		
ACTION (ISS Office Use Only) <input type="checkbox"/> Feasibility assessment approved <input checked="" type="checkbox"/> Feasibility assessment waived <input type="checkbox"/> Request delayed <input type="checkbox"/> Request rejected		
Assigned to <u>Sandra Shepherd</u> Approved Budget \$ <u>450,000</u> Start Date <u>ASAP</u> Deadline <u>ASAP</u> Backlogged until date: _____ Reason: _____		
Authorized Signatures: <u>Rebecca J. Todd</u> Chair, ISS Executive Steering Body		
<u>Galen Kirkhoff</u> Project Executive Sponsor		

FORM ISS 100 RPS (Last revised December, 1999)

Sample Problem Statements

Problem Statements					
Project: Member services information system		Project manager: Sandra Shepherd			
Created by: Sandra Shepherd		Last updated by: Robert Martinez			
Date created: January 9, 2003		Date last updated: January 15, 2003			
Brief Statements of Problem, Opportunity, or Directive	Urgency	Visibility	Annual Benefits	Priority or Rank	Proposed Solution
1. Order response time as measured from time of order receipt to time of customer delivery has increased to an average of 15 days.	ASAP	High	\$175,000	2	New development
2. The recent acquisitions of Private Screenings Video Club and Game-Screen will further stress the throughput requirements for the current system.	6 months	Med	75,000	2	New development
3. Currently, three different order entry systems service the audio, video, and game divisions. Each system is designed to interface with a different warehousing system; therefore, the intent to merge inventory into a single warehouse has been delayed.	6 months	Med	515,000	2	New development
4. There is a general lack of access to management and decision-making information. This will become exacerbated by the acquisition of two additional order processing systems (from Private Screenings and Game-Screen)	12 months	Low	15,000	3	After new system is developed, provide users with easy-to-learn and -use reporting tools.
5. There currently exist data inconsistencies in the member and order files.	3 months	High	35,000	1	Quick fix; then new development.
6. The Private Screenings and GameScreen file systems are incompatible with the SoundStage equivalents. Business data problems include data inconsistencies and lack of input edit controls.	6 months	Med	unknown	2	New development. Additional quantification of benefit might increase urgency.
7. There is an opportunity to open order systems to the Internet, but security and control are an issue.	12 months	Low	unknown	4	Future version of newly developed system
8. The current order entry system is incompatible with the forthcoming automatic identification (bar-coding) system being developed for the warehouse.	3 months	High	65,000	1	Quick fix; then new development