College Management Software System
Highlights

Encompasses all major administrative services. From pre-admissions to degree audit.

Easy to use applications. No computer codes mean faster training.

Deploy applications in client-server environment or web-based. Or mix and match.

Cooperative development and complete source code mean your institution controls the final project.

Cooperative development allows radically lower prices than previously available packages.

Fourth generation tools for rapid deployment and integrated database access.
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Technology Objectives

Use latest generation technology for maximum price/performance

Use relational database for improved flexibility

Use plain-text for all fields - no computer codes

Base system on "open" standards (TCP/IP, Unix, SQL, etc.)

Deliver services to users' desktops

Integrate disparate services into one system

Interoperate with third party software for querying and reporting
Admissions

a) Online admissions forms
b) On-site, immediate admissions
c) Application tracking (graduate and undergraduate)
d) Prospective student query and tracking

Admission Criteria Form

This screen is for creation of a set of criteria that can be used during admissions to rank applicants. For each criteria enter a name and any notes or explanations about the use of this criteria. In the second block select the school or department for which this criteria must be tracked during the admission process. Add the importance of this criteria to acceptance and any additional notes. This list will be used to calculate an overall score for the applicant. If the criteria is required by all departments chose the college as the department having the requirement.
Section Creation and Room Assignment

a) Interactive section creation  
b) Special event scheduling  
c) Software for batch room assignment

Sample Room Form

This screen is for updating information about rooms at the college. The first block is for query of building information including abbreviation, name and site. The second block is for entry of room information. Data about the room size and number of seats can be entered. In addition each room must be assigned to one campus partition. This information is used when selecting rooms for a specific class section. Sections can be preferentially assigned within a set of rooms all belonging to a single partition. Enter a fill-ratio such as .75 and the number of seats.
Course Creation (Programs and Curricula)

a) Tracking changes in programs and course content
b) Creation of requirements (pre or co-requirements)
c) Planning and recording of degree programs
d) Planning and recording of special programs

Create New Course Form

This screen allows creation and updates to the master list of courses. Functions that can be performed include creation of new courses, reformulation of existing courses and entering information about cross-listed courses. These functions are divided into three blocks. In the first block courses are defined. These can be linked to prior or subsequent versions of the course by navigating to the related other form. Note that courses cannot be deleted once they have been used for sections. This allows transcripts to be generated which show the correct course description as of the time when the course was offered. Courses can be marked as obsolete by entering an ending date.
In the second block, individual components of a course are entered. This includes the type (Lecture, Lab, etc.) the number of classroom hours/week and the default section enrollment figures. At least one component must exist for each course.

In the third block, additional details about the course are entered. This includes the number of credits and hours and the subject under which it is listed in the bulletin. At least one listing must exist for each course. Create cross-listed courses by entering additional records in this block. Courses which differ only in the number of credits or hours should also be defined here.

**Advisement and Student Services**

a) Checking for eligibility and requirements for programs  
b) Degree audit checking  
c) Discipline, veteran, handicap, immigration, health and other personal information.  
d) Student housing assignment
Record Advisement Office Visit Form

This screen is to record details of visits to the Advisement Office. Details of when the visit was made and additional notes can be entered. Other types of events can be recorded as well.

Bursar

a) Generation of student statements
b) Accept and track payments
c) Allocate receipts to appropriate accounts

Summary of Student Charges Form

This screen allows the creation of manual charges and credits for a student. Query for the student in block one. Add specific charges or credits into the lower blocks. Automatic payments are recorded elsewhere.
Student History

a) Grades  
b) Transcripts  
c) Academic History  
d) Immigration tracking (9/11)

Lookup Student Grades

This screen is for lookup of student grades. Select student in the first block. Examine grades in second block. Scroll sideways for additional information.
### INS Codes Authority Table

This screen is for entering the INS codes which designate a person's immigration status. Enter the INS code, for example H-4. Then enter a description and any clarifying notes. These codes are used as a reference for selecting appropriate documentation for an individual. This is a system setup form.
Transfer Evaluation

a) Intra-university articulation agreements
b) Expandable database to other schools

Grant Transfer Credit Form

This screen is to assign college credits to a transfer student. Select the student in block one. Then select the original course in block two. The equivalent course will be inserted when an articulation agreement is already in place. Make any adjustments to the credits to be granted.

Alternatively to make a special evaluation: select any course from the list of courses offered here. Add authorization and original credits.
Registration Transactions

a) Scheduling registration
b) Online transactions
c) Interface with bursar and financial aid
Enrollment Right side of form

This screen is for registering students in specific class sections. Query for the desired student in the first block. Use the list-of-values button to select the desired section in the second block. In the popup form select the specific course. For courses with multiple components select any component. All related components and linked courses will be copied into the enrollment form.
Financial Aid

a) Tracking student eligibility
b) Database of aid sources for advisement

Financial Aid History and Eligibility Form

This screen is for review and update of student's financial aid history. In block one select or enter details of awards. In block two select any reasons as to why the award was not granted.
Management Reports

a) Academic Planning
b) Productivity and related personnel issues
c) Integration with budgeting and fiscal planning

Demographic Data
State of the Art University

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>F</th>
<th>M</th>
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<tbody>
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<td>American Indian, Native Alaskan</td>
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<td>Asian or Pacific Islander</td>
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<td>Chose not to Answer</td>
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<td><strong>11920</strong></td>
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Demographic Data by gender
Popular Prior Colleges
State of the Art University

Report run on: December 9, 1999
1:38 PM

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<tr>
<th>Name</th>
<th>Count</th>
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<tr>
<td>Foreign Advanced Standing</td>
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<tr>
<td>Bronx Community College</td>
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<tr>
<td>Fiorello H. LaGuardia Community College</td>
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<tr>
<td>New York City Technical College</td>
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<td>State of the Art University</td>
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<td>Hunter College</td>
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<td>Hostos Community College</td>
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<td>Kingsborough Community College</td>
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<tr>
<td>Brooklyn College</td>
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<tr>
<td>Unknown</td>
<td>27</td>
</tr>
<tr>
<td>Herbert H Lehman College</td>
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<tr>
<td>Foreign</td>
<td>20</td>
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<td>Baruch College</td>
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<tr>
<td>Queensborough Community College</td>
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<td>College of Staten Island</td>
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<td>John Jay College of Criminal Justice</td>
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<td>Foreign No Advanced Standing</td>
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<td>Medgar Evers College</td>
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<tr>
<td>Nassau Community Col</td>
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</tbody>
</table>

Most popular prior college attended for transfer students
Integration with Personnel System

a) Faculty Directories

b) Office Information and email links

Details about Faculty Form

This screen is for entry of data about faculty members. Names and other personal information can be recorded. Related screens permit entry of address and other information. Some of this information can appear on transcripts or in the course registration information.
Development Methodology

1. Fourth generation tools for improved productivity – Fully Oracle based (Designer, Developer & DB)

2. Tools provide for total life-cycle management

3. Integrated database and client development using common tools

   a) Full documentation as integral part of development End user how to documentation
   b) Developer documentation for design decisions
   c) Project documentation for project status management

4. Easier Maintenance (Normal cost is 20% development and 80% maintenance)
COSTS

Our standard fee for licensing the run-time software is $50 per student.

Restricted source code licensing is available at a negotiated price.

The minimum charge would be at the 500 student level ($25,000).

Annual maintenance charges for updates and support are currently at 22% of license price.

Consulting and customization fees are currently $150-$200 US per hour.

Underlying Oracle software licenses (specific use) will be provided at 50% off Oracle list price until further notice.

Special Panel pricing is available for selected colleges. (Call for details).
### COST-BENEFIT ANALYSIS

The table below shows some sample costs for a mid-sized college. The exact numbers will depend upon the size of the institution, special requirements and amount of effort supplied locally versus purchased.

<table>
<thead>
<tr>
<th></th>
<th>Internet Student System</th>
<th>Existing Legacy System</th>
<th>Other Vendors</th>
<th>Your System</th>
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<td>Software</td>
<td>$25,000-$100,000</td>
<td>Paid For</td>
<td>$250,000-$2,000,000</td>
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<tr>
<td>Database Licenses</td>
<td>$10,000-$100,000</td>
<td>Paid For</td>
<td>$50,000-$200,000</td>
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<td>Hardware</td>
<td>$50,000-$1,000,000</td>
<td>Paid For</td>
<td>$50,000-$1,000,000</td>
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<tr>
<td>Hardware Maintenance</td>
<td>$2,500-$50,000</td>
<td>$120,000</td>
<td>$2,500-$50,000</td>
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<tr>
<td>Staff Support</td>
<td>2 persons @$50,000</td>
<td>5-10 persons @$50,000</td>
<td>2-10 persons @$50,000</td>
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<tr>
<td>Transition Costs</td>
<td>$25,000-$100,000</td>
<td>0</td>
<td>$100,000-$1,000,000</td>
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<tr>
<td>Yearly Support</td>
<td>$10,000-$50,000</td>
<td>$200,000-$500,000</td>
<td>$100,000-$500,000</td>
<td></td>
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<tr>
<td>Two Year Totals Low Range</td>
<td>$300,000</td>
<td>$790,000</td>
<td>$750,000</td>
<td></td>
</tr>
<tr>
<td>Two Year Totals High Range</td>
<td>$1,700,000</td>
<td>$1,740,000</td>
<td>$6,200,000</td>
<td></td>
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<tr>
<td>Amortization Time</td>
<td>One Year</td>
<td>NA</td>
<td>Never</td>
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</tr>
<tr>
<td>Future Annual Savings vs Legacy System</td>
<td>$300,000-$570,000</td>
<td>-0-</td>
<td>-0-</td>
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</tbody>
</table>

Because of the dramatic decrease in the cost of software and hardware it is possible to recover the expenses of a new system in one year! Savings will continue to mount up in subsequent years. The money saved can be reallocated to other areas rather than being absorbed in maintaining an expensive, inefficient legacy system.
Web Based Self Services

Public Web Services

Ask for material about the college to be sent to you
Apply for Admissions to College
Check on status of application
View College Departments
View Courses Offered
View Sections Offered
View public attendance records for any student

Password-protected services for students

Self Registration for students with an approved course of study
Self Registration for a student permitted to take any course
View My Grades
View My Degree Progress
View My Class Schedule
View when and where enrolled classes meet
Describe Housing Preferences
Request transcript to be sent
Enter Course Evaluations for courses taken

Password-protected services for faculty

Show grades by section
Enter grades by section
View class assignments

Web-Enabled Administrative Applications

Client/server screens running within a web browser

These are the core administrative functions provided by the system and are meant for administrators only. Any form can be web-enabled.
Resource Requirements

Software

The software as delivered supplies the core functionality of all systems shown in the tour.

All policies are controlled by rules stored in database tables and do not require programming staff to tailor to your institution. These policies include academic requirements, billing costs, admissions criteria and financial aid eligibility. Thus your existing staff can setup most of the system without extensive training or special expertise.

In addition you get the full design code for the system. This is stored in the database and can be modified by your programming staff using the supplied development tools. The use of these tools will require staff training, however there are many vendors supplying training which typically takes two to three weeks.

Changes to the system can be made directly by your staff, without waiting for the next vendor release and without any special approval. If you wish to have your changes incorporated in the overall product so that others may benefit, special arrangements can be made to coordinate development. By having many institutions contribute to the refinement of the system, costs are kept low and the best features can be developed.

Since all software is based upon industry standard software, the system can be accessed by any client-side package you wish to use. This leverages existing staff skills. For example, your users can use Excel, Crystal Reports or any other ODBC compliant software.

Typical systems of this complexity require:

- Database Administrator
- Forms and Reports Developer (one or two)
- Operations Staff (one or two)

We at Virtual DBA Inc. can perform the above functions for you remotely if you do not have any of these personnel on staff.
Hardware

The database runs on any standard hardware, using any of these operating systems: Microsoft Windows, Unix, Linux, IBM Mainframe OS.

Client forms and reports run on Microsoft Windows and Unix workstations.

Internet-enabled forms run through any Java capable browser. Currently MS Windows and Solaris browsers, with Macintosh expected shortly.

One mid-sized server to support the database. Typical cost between $15,000 - $100,000.

For web-based forms additional application servers may be required depending upon the number of simultaneous users. Exact sizing recommendations are part of the evaluation process.