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**A study on Turkish Folk Dance Contests and Evaluation of Contests in Computerized  
Environment\***

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**Abstract:**

An automation system for the evaluation of Turkish folk dance contests is proposed in this study. The system is composed of a database server and two client applications. With the development of this system, an objective evaluation is guaranteed without calculation mistakes made by humans. This database is expected to grow in the future and become a warehouse for both the Turkish Folk Dances Federation and academicians interested in this field. The report generation capabilities of the proposed system is also lets the referee's to concentrate on only the evaluation of the contest, not the procedure of writing down the results to a hardcopy.

**Introduction**

In Turkey, the first folk dance contest was arranged by the Tourism and Presentation Ministry in 1967 and it follows several folk dance contests arranged by Milliyet dating from 1968 [1]. Ministry of National Education and Youth and Sport General Directorate arranges folk dance contests from 1980's to nowadays. It is known that participation to these contests in 1980 to 1990 is very high. In the season 2005-2006, the participation to the contests are not in the ratios before mentioned. There are several reasons for this decreasing. And the evaluation of contests, criterions used in determination of the results, are the major reasons.

Consequently, evaluation process has to be well clear to the all participants and spectators of the contests to improve the feeling of trust. For this reason, the evaluation of contests in a computerized environment seems a solution. All the participants and spectators will be comfortable with the use of computers.

Turkish folk dance contests have a time consuming evaluation procedure. Each team contending has 7 to 11 minutes of time to show their performance. While the team is acting, each of 9 contest referees are grading the teams based on evaluation document. These documents are than gathered together and mean scores for each team is calculated by the referees. This is a very time consuming procedure and is open for mistakes or interferences.

With the proposed system, the evaluation documents are digitized and referees are grading the teams from their computers. All the calculations required is automatically done, all the reports needed are automatically generated, and all the results are listed for audiences in real time.<sup>3</sup>

The system depends on two legs, a database server and client applications that are connecting and manipulating the data residing on this server. With the use of internet

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technology and a central server configuration, simultaneous contests could be evaluated by the proposed system. Visual Basic .NET is used in the development of windows forms based client applications. Ms Sql Server 2000 evaluation version holds the database.

### **Evaluation of Contests using Computerized Environment by the Specialized Referees**

In the scope of folk dance workers, it has to be very important to force one to choose to be an instructor or to be a jury. Within the regulations of Federation of Turkish Folk Dances, this change has to be made surely. For this reason, existing working areas of referees and instructors must be divided into three categories; referee, observer and instructor. After this division, areas of specialization are to be defined within these three groups. In this way, evaluations and trainings that needs different expertises and practices will be separated.

It is known that, the lack of knowledge of the referees causing several problems in contests. This lack of knowledge becomes intense especially in the matters of game, music and stage and partially in clothes. It is expected from referees to evaluate all the teams performing in a contests without looking at the specialization of the referee. Referees are evaluating their own districts more strictly. On the other hand, teams from less known districts are evaluated superficially, less problems are found in their dances, as a result, they could be seen more successful. This causes unfair competing.

A solution to this problem is specialization of referees. The jury of the contest has to be divided into specialization areas; game, stage, clothes and music. If the specialization is game, for the reason that the game divided into game types and game districts, the teams that will be evaluated by the referees could be clearly defined. The grading system of the contests must lay on a realistic criterions and also the performance evaluation of referees has to be made. With the results of this referee evaluation, the commissioning of the referees in the future contests can be decided.

### **Computerized Environment for the Evaluation of Contests**

The proposed system is based on a database server, and two client applications developed to connect this server, one management application and referee evaluation applications.

Microsoft Visual Basic .NET is used as the development platform and SQL Server 2000 Evaluation is the database server used. Figure 1 illustrates the overall system.

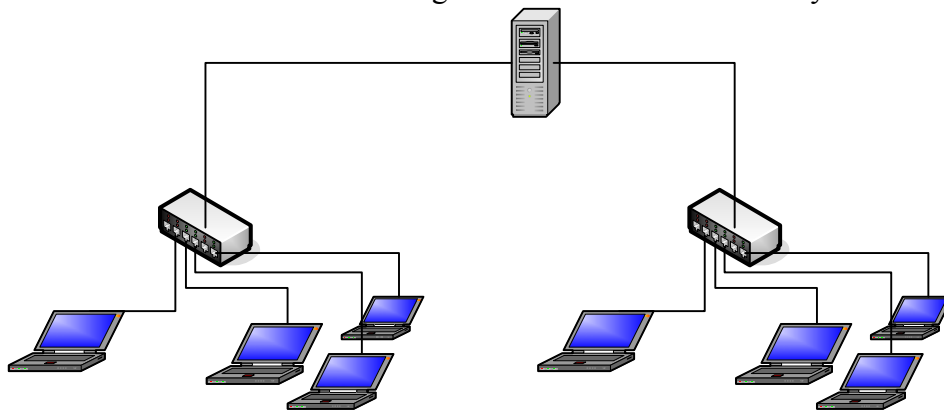


Figure 1. Overall system configuration

The automation requires an internet connection to allow client applications to connect the central database server. This server holds all the required information. In Figure 1, it is

seen that there are two folk dance contests are going on in two distinct places. These places could be anywhere in Turkey that lets the client applications to connect the database server.

Each contest must have a management application residing on a computer that manages the contest and one computer for each referee to evaluate the teams competing. It could be concluded that, for a 7 refereed contest, at least 8 computers are needed to accomplish the evaluation.

TCP/IP protocol is used by the client applications to connect the database server. ADO.NET database access technology take cares of the connection to the server. A SqlCommand based parameterized structure is used to improve the performance. Sql server stored procedures are developed for improved performance.

The following paragraphs numbered a. Database, b. Management Application and c. Referee's Evaluation Application are explaining the overall system in detail.

#### **a. Database**

The system has a database that contains 21 tables holding all the information required to perform the evaluation. These tables could be summarized as below:

→ Contest Tables:

These tables hold the data about the contest, for instance, the name, place, date, category, the teams joining the contest, the referee's appointed to the contest etc.

→ Team Tables:

The data of the teams that will compete in the contests are added in these tables. They contain the players, trainers, and teams information.

→ Referee Tables:

These tables contain all the required information for the referees. The speciality, knowledge, seminar data etc are stored in these tables.

→ Result Tables:

The results of the contests that are automatically calculated during the evaluation process and are stored in these tables.

→Parameter Tables:

The evaluation parameters are changing in time, these tables store the parameters for the evaluation parameters and when a change occurs, there are updated.

→Auxiliary Tables:

These tables are used to perform the tasks needed and used by the management application.

#### **b. Management Application**

The technical referee appointed to the contest uses this application. There are several controls residing on the application. Figure 2 shows the main form of the management application.

Figure 2. The management application

The application only accepts the saved data. In other words, you could not use any object that is not defined before. The buttons seen on the bottom left of the form lets definitions of the following data:

1. Teams
2. Trainers
3. Team players
4. Referees
5. Dances
6. Evaluation parameters

Teams, trainers, team players and referees definition forms are resembles each other, but differs in data. The most complicated form is the referee definition form and is shown in Figure 3.

Figure 3. Referee selection and detail form.

Two step procedure is followed to insert, update or delete a referee record. In the first step, a summarized list of all referee records are listed on the form. It is seen in Figure 3 behind the referee details form. The user could filter the records based on criteries like identity field, name and surname, speciality. In the second step, the detail form is shown. By clicking the corresponding controls on the form, the user could enter the details for the referee. The same procedure is used for the team, trainers and team players record entry.

In Figure 4, the definition form for the dances that can be performed by the teams is shown.

Figure 4. Dance definition form

It is stated before that the evaluation of the contest lies on some parameters. These parameters are determined by a committee and must be entered before the contest. In Figure 5, the parameter definition form is shown.

P.No	P. Adı	P. Tutarı	P.Haf	Açıklama	Puan
1	GIYSI (20 Puan)	Silme	A	YÖRESEL VE YÖREDE KABUL EDİLMİŞ OYUNLARIN DIŞINDA OYU...	2
2	MÜZİK (30 Puan)	Silme	B	OYUNLARDA YÖRESEL TAİRİ YOK	2
3	OYUN (20 Puan)	Silme	C	OYUN - FIGURLERDE EKSİKLİK, FAZLAÇLIK VEYA YANUŞUK VAR	2
4	GIYSI (15 Puan)	Artışık	D	OYUNCULARDA HAREKET UYUMSUZLUĞU, JEST - MİMİK - İFADE ...	1 2 3 4 5 6
5	MÜZİK (20 Puan)	Artışık	E	OYUNCULAR MÜZİK İLE UYUM SAĞLAYAMIYOR	1 2 3 4
6	OYUN HAREKE...	Artışık	F	AŞIRI FIGÜR TEKRARLARI VAR	1 2 3 4
7	OYUN-SUNU (20)	Artışık	G	OYUN ARAÇLARI AMACINA UYGUN KULLANILMADI	1 2
			H	SAHNEYE GİRİŞ VE ÇIKIŞ HATALI	1 2 3
			I	ÇİZGİLERİN SAHNEYE YERLEŞİMİ VE SAHNE TRAFİĞİ HATALI	1 2 3 4 5 6
			J	ÇİZGİLER BOZUK, ÇİZGİ DEĞİŞİMLERİNDE HATALAR VAR	1 2 3 4 5 6
			K	ÇİZGİLER OYUNLARIN KARAKTERİSTİK ÖZELLİKLERİNE UYGUN O...	1 2 3 4
			L	ÇİZGİLER ARASINDA PERDELEME, SOLO İLE FON ARASINDA UYU...	1 2 3
			M	ÇİZGİLERİN OLUŞUMUNDA FORM ZENGİNLİĞİ YOK	1 2 3
			N	ÇİZGİLERİN OLUŞUMUNDA SAYISAL - FİZİKSEL DENGE YOK	1 2 3

Figure 5. Parameter definition form

The organizing committee approves the teams that want to join the contest and determines the order of teams. Order of teams and the dances that will be performed by each team joining is entered to the application by the following form shown in Figure 6. The team records could also be filtered on some criterias to find a team from the team list.

The list on the top of the form shows all the teams defined in the database. The user could filter the records and select the teams and send them down in the second list. The second form (bottom right) in Figure 6 shows the dance order of a team.

**Oyun Sıralaması**

Yarışma Adı: Adana Valiliği

Arama Kriteri: Takım Adı

**SEÇİLEBİLECEK TAKIMLAR**

Seç	Takım Adı	İli	Yereli	B.Oy	Bn.Oy	B.Müz	Bn.Müz	Sorumlusu	Antrenör
<input checked="" type="checkbox"/>	Adana Folk. Az. Genç. K.	Adana	Adana	69	67	0	0	MEHMET DÖNMEZ	
<input type="checkbox"/>	AHDD Anadolu Halk Oyunl...	Ankara	Ankara	30	40	0	0	VOLKAN DOĞAN	
<input type="checkbox"/>	Erciyes Üniversitesi	Kayseri	Adana	2	4	3	3	ADINAN USTA	AHMET CAFIHOĞLU
<input type="checkbox"/>	F.E.M. Folklor Eğitimi Mes.S.K.	Ankara	Ankara	23	23	0	0	ZEKERİYA BİYKLUĞLU	
<input type="checkbox"/>	Gazipaşa İktisadi İhtisat Sp...	Aksaray	Aksaray	31	56	0	0	OSMAN ERİSOY	
<input type="checkbox"/>	Gençlik Merkezi Spor Klüb.	Bolu	Bolu	21	21	0	0	ZEKERİYA BİYKLUĞLU	
<input type="checkbox"/>	Giresun Folklor Kültür Sanat D...	Giresun	Giresun	30	30	0	0	A.OMERİ SAKARYA	
<input type="checkbox"/>	Kocatepe Anadolu Lisesi Gen...	Alyonkarahisar	Alyon	24	24	0	0	SADIK CETİNER	
<input type="checkbox"/>	Konya Selçuk	Konya		0	0	0	0		
<input type="checkbox"/>	Mardin	Mardin	Kahramanmaraş	1	1	1	2		
<input type="checkbox"/>	Mardin Devleti	Adana	Adana	2	2	2	2		

**SEÇİLEN TAKIMLAR**

Seç	Sıra	Takım Adı	İli	Yereli	B.Oy	Bn.Oy	B.Müz
<input type="checkbox"/>	1	Gaziantep Üniversitesi	Gaziantep		2	3	5
<input type="checkbox"/>	2	Çukurova Üniversitesi	Adana		2	2	2
<input type="checkbox"/>	3	Adana Valiliği	Adana		3	3	2

**Oyun Sıralamasını Girin**

Oyun Sıralamasını Girin

Takım Adı:

Merülü

Oğulu

Halay

Oyun Adı:

Merülü

Ekle Sil

Figure 6. Team order and dance data form

Each contest must have several referees to evaluate the competition. The referees for a contest is determined by a committee, and then entered to the database with the referee appointment form shown in Figure 7.

**Hakem Atama**

Yarışma Adı: 8 Seyhan İlçe Yarışması

Arama kriterini girin: Adı Soyadı

**SEÇİLEBİLECEK HAKEMLER**

Seç	Görevi	Tc Kimlik No	Lisans No	İli	Yereli	Adı Soyadı	Klasmanı	Email	Detay
<input type="checkbox"/>		12988836387	82772	Ankara		Baş Hakem DENİZ			Detay
<input type="checkbox"/>		54677678781	76525	Adana		Baş Hakem	Yıldız	bashakem@cu.edu.tr	Detay
<input type="checkbox"/>		69484212689	34444			De	Yıldız		Detay
<input type="checkbox"/>		34526374653	72646	Mardin		Değerlendirme7	Yıldız	deger7@cu.edu.tr	Detay
<input type="checkbox"/>		53675252416	72638	Adana		Değerlendirme8	Yıldız	deger8@cu.edu.tr	Detay
<input type="checkbox"/>		65566666731	73636	Adana		Değerlendirme9	Yıldız	deger9@cu.edu.tr	Detay
<input type="checkbox"/>		43247665954	4242			İsmail ŞEN	Ulusal	4324	Detay
<input type="checkbox"/>		76826551893	6287489	Mardin		Kamuran AVŞAR	Ulusal	deger3@cu.edu.tr	Detay
<input type="checkbox"/>		34256172821	72727	Kilis		Masa Hakemi1	Yıldız	masahakemi1@cu.ed...	Detay

**ATANAN HAKEMLER**

Seç	No	Görevi	Tc Kimlik No	Lisans No	İli	Adı Soyadı	Kullanıcı Adı	Şifre	Detay
<input type="checkbox"/>	1	Baş Hakem	11111	1111	Adana	Muzaffer SÜMBÜL			Detay
<input type="checkbox"/>	2	Değerlendirme H.	65748786382	435627	Adana	Değerlendirme6			Detay
<input type="checkbox"/>	3	Değerlendirme H.	85646742524	763535	Kilis	Değerlendirme5			Detay
<input type="checkbox"/>	4	Değerlendirme H.	46384046244	627949	İstanbul	Değerlendirme4			Detay
<input type="checkbox"/>	5	Değerlendirme H.	12345678914	12346	Adana	Değerlendirme2			Detay
<input type="checkbox"/>	6	Değerlendirme H.	12345678912	12345	Adana	Değerlendirme1			Detay

Figure 7. Referee appointment form

There is two lists on the form and the technical referee selects from the top list and send the referee record to the bottom list that contains appointed referees. After completing these data entry phases, technical referee could now start the contest by using the following form shown in Figure 8. Each team joined to the contest starts with the order defined before and show their performances. When all the referee's are finished with the evaluation form, technical referee could save the results of the corresponding team.





YARIŞMA SONUCU												
YARIŞMA:	Seyhan İlçe Yarışması	BAŞ HAKEM:	Muzaffer SÜMBÜL	MASA HAKEMİ (1):								
DALI:	Artistik	YARDIMCI HAKEM:		MASA HAKEMİ (2):								
YERİ:	Adana	MUSABAKA HAKEMİ (1):	Muzaffer SÜMBÜL	MUSABAKA HAKEMİ (2):	Degerlendirme1							
TARİHİ:	01.12.2006	MUSABAKA HAKEMİ (3):	Degerlendirme2	MUSABAKA HAKEMİ (4):	Degerlendirme4							
KATEGORİSİ:	Yıldız	MUSABAKA HAKEMİ (5):	Degerlendirme6	MUSABAKA HAKEMİ (6):	Degerlendirme5							
BASAMAĞI:	Grup	MUSABAKA HAKEMİ (7):		MUSABAKA HAKEMİ (8):								
		MUSABAKA HAKEMİ (9):										

Sıra	Takım Adı	Oyun Yöresi	Süre	MH1	MH2	MH3	MH4	MH5	MH6	MH7	MH8	MH9	Toplam Puan	Ortalama Puan	Derece
1	Erciyes Üniversitesi	Adana	2 dk 18 sn	69	61	73	85	95	91				474	74,50	3
2	Seyhan Halk Eğitim Merkezi	Adana	2 dk 17 sn	60	46	58	78	94	92				428	67,00	5
3	Adana Valiliği	Çukurova	1 dk 34 sn	70	48	58	94	75	87				432	67,50	4
4	Gaziantep Üniversitesi	Gaziantep	2 dk 26 sn	71	31	91	86	89	90				452	76,50	2
5	Çukurova Üniversitesi	Adana	10 dk 42 sn	73	38	76	87	87	89				450	80,75	1

Figure 10. Contest results form

### c. Referee's Evaluation Application

Each referee of the contest must have a computer in front of him. To enter the evaluation form, each referee must have a valid username and password that identifies him. The order of the teams are determined by the management application and the corresponding auxiliary tables are updated at regular intervals. The referee applications are also checking this auxiliary tables at 10 sec intervals. After the referee identifies himself, the contest information form shown in Figure 11 is displayed.

Takım Adı	İli	B.Oy.	By.Oy.	B.Müz.	By.Mü.	Antrenörü	Sorumlusu
Gaziantep Üniversitesi	Gaziantep	2	3	5	2		CENGİZ KARAKOYUN
Çukurova Üniversitesi	Adana	2	2	2	3		AHMET ÇARHOĞLU
Adana Valiliği	Adana	3	3	2	2		MUHARREM ÜNAL

Figure 11. Contest information form



The core form of the proposed system is shown below in Figure 12. The evaluation form. This form is drawn parametrically. The referee grades each team with this form and saves his grading.

On the evaluation form, the ten columns on the right hand side of the datagrid in the Figure 12, several grades are displayed. These grades are coming from database tables. Each row in the evaluation form is a criteria that a team has to be proof. If a team has a problem to satisfy a criteria, a referee may decrease from a total amount of 100 by the corresponding grades on that criteria. As an instance, for the second row, there are three selections that could be selected by the referee, 1, 2, 3. If the referee selects 3, that the team result automatically reduced 3 points to 97.

Puan Türü	Açıklama	Puan								
GIYSİ (20 Puan)	A YÖRE GIYSİSİ DIŞINDA BİR GIYSİ GIYILMIŞ	5	5							
	B GIYSİ PARÇALARI EKSİK VEYA YANLIŞ	123	1	2	3					
	C GIYINIŞE ÖZEN GÖSTERİLMEMİŞ (Çözüldü, dağıldı, düştü)	1234	1	2	3	4				
	D AMACA UYGUN MAKYAJ YAPILMAMIŞ TAKI-AKSESUARLAR EKSİK VEY...	123	1	2	3					
MÜZİK (30 Puan)	A AKORD BOZUK	2	2							
	B MÜZİKLER YÖRESEL EZGİ VE RİTİMLERE UYGUN İCRA EDİLMİYOR	12345	1	2	3	4	5			
	C MÜZİKLER NOKSAN VEYA HATALI ÇALINIYOR	1234	1	2	3	4				
	D HIZ HATASI VAR	12	1	2						
	E SOLİST, SOLİSTLER VE ÇALGILARDASES KAYMASI VAR (detone, sürtö...)	12	1	2						
	F EZGİ - RİTİM EKSİK VEYA FAZLA	1234	1	2	3	4				
	G SESLER BİRBİRİNİ ÖRTÜYOR. (Çalgıla, solist veya vokal net duyulmuyor)	12	1	2						
	H OYUN ANLATIMI İLE MÜZİK ANLATIMI ARASINDA UYUM YOK	1234	1	2	3	4				
	I MÜZİKTE DÜZENLEME YOK	4	4							
OYUN (50 Puan)	A YÖRESEL VE YÖREDE KABUL EDİLMİŞ OYUNLARIN DIŞINDA OYUN VAR	2	2							
	B OYUNLARDA YÖRESEL TAVİR YOK	2	2							
	C OYUN - FIGÖRLERDE EKSİKLİK, FAZLALIK VEYA YANLIŞLIK VAR	2	2							
	D OYUNCULARDA HAREKET UYUMSUZLUĞU, JEST - MİMİK - İFADE EKSI...	123456	1	2	3	4	5	6		
	E OYUNCULAR MÜZİK İLE UYUM SAĞLAYAMIYOR	1234	1	2	3	4				
	F AŞIRI FIGÖR TEKRARLARI VAR	1234	1	2	3	4				
	G OYUN ARAÇLARI AMACINA UYGUN KULLANILMADI	12	1	2						
	H SAHNEYE GİRİŞ VE ÇIKIŞ HATALI	123	1	2	3					
	I ÇİZGİLERİN SAHNEYE YERLEŞİMİ VE SAHNE TRAFİĞİ HATALI	123456	1	2	3	4	5	6		
	J ÇİZGİLER BOZUK, ÇİZGİ DEĞİŞİMLERİNDE HATALAR VAR	123456	1	2	3	4	5	6		
	K ÇİZGİLER OYUNLARIN KARAKTERİSTİK ÖZELLİKLERİNE UYGUN OLUŞ...	1234	1	2	3	4				
	L ÇİZGİLER ARASINDA PERDELEME, SOLO İLE FON ARASINDA UYUMSU...	123	1	2	3					
	M ÇİZGİLERİN OLUŞUMUNDA FORM ZENGİNLİĞİ YOK	123	1	2	3					
	N ÇİZGİLERİN OLUŞUMUNDA SAYISAL - FİZİKSEL DENGİ YOK	123	1	2	3					

HAKEMİN ADI-SOYADI: BasHakem TOPLAM PUAN: 100 SİLİLEN PUAN: 0 SONUÇ PUANI: 100 KAYDET

Figure 12. Evaluation form

## Conclusion

It is very important to reflect the criterions used in the evaluation of the contests, evaluators, and results to the ones involved. For this reason, a trust atmosphere can be formed by the use of computerized environment to evaluate and collect the data of referees and contests results, and also sharing the results on the web.

With the proposed system, like the ice dance contests, the grades given by each referee to the performing team can be clarified. By this way, the discussions happening at the end of the contests, purposefull evaluation and care for assertions could be prevented. Everyone could see the grades of the referees on their specialization. With the use of a projector and web, all spectators could see the results of the while the contests is keeping on. Consequently, the referees commissioned in the contests will set out with consciousness of responsibility.