

ECF MEMBERSHIP SYSTEM SOFTWARE REQUIREMENTS

SUMMARY

The English Chess Federation has a membership scheme where individuals may join the Federation as members for a given season. All memberships run to 31st August in a given year, but from 1st July onwards memberships are sold for the period to 31st August in the following year. There are multiple categories of paid membership (currently 4, referred to as Bronze, Silver, Gold, & Platinum), with differential rates for junior members, and two categories of free membership. The latter are Junior Silver membership offered free to entirely new members as a concession, and Lifetime Platinum memberships awarded for long or special service. Memberships can now be taken out only for a period of one year.

There are at present roughly 10,000 members joining in any one season. However, the turnover is substantial, amounting to around 2000 members per annum. As the membership system records payments, and is therefore subject to our obligation to retain financial records, the total number of records stored will be more of the order of 20,000.

The ECF Membership System Software is intended to provide the following functionality:

- permit individuals to join online, including secure acceptance of payments, in any of the categories for which they are eligible;
- permit the automatic processing of lists of individuals taking out membership or new members renewing in any appropriate category submitted by Membership Organisations or other local organisers;
- store details of all members and the payments made by them or on their behalf whether made online or not;
- permit members to upgrade to a higher category of membership at any time;
- permit members to renew their membership for each new season in either their existing or any other appropriate category;
- permit members to edit the personal details stored for them, or any other member for whose payment they are responsible, at any time;
- automatically produce daily lists of current membership, including the category of each member, for organisers and administrators;
- permit administrators to generate renewal notices at the end of each year reminding existing members of the need to renew, and to generate reminder notices where appropriate to those who have not renewed their membership;
- permit administrators to generate a list of payments received, including the means of payment, to enable allocation of payments within the Federation's accounting software;
- permit administrators to extract a list of new and amended e-mail addresses in a format suitable for import into our opt-out publicity mailshot software;
- permit administrators to extract a list of new members who have joined during a specific period for matching membership data to the grading database;
- permit administrators to carry out ad-hoc queries on the stored data.
- permit the inclusion of space on the application form for members to make donations to the Federation for specific purposes, the purposes to be editable by administrators over time.
- permit the inclusion of space on the application form for members to make donations to The Chess Trust.

In addition the Federation intend in the future to permit members to opt for their membership renewals to be taken by Direct Debit; the software must facilitate this process in so far as it is appropriate, and ensure that members so opting are included in all appropriate outputs and reports.

It is not a requirement that the system be capable of generating a list of members at any past date; however this limitation must not be permitted to introduce a single point of failure in the generation of an accurate membership list at 31st August, immediately prior to the expiry of existing memberships.

The online system should meet industry standards for accessibility, and should be fully functional on any size of device likely to be used to access it, including smartphones.

ECF MEMBERSHIP SYSTEM SOFTWARE REQUIREMENTS

DATA TO BE COLLECTED

The following personal details are to be collected for each member. Items in bold should be obligatory fields.

Title

Forename(s)

Surname

Gender

Address [3 lines, only first line obligatory]

Town

County

Postcode

Country (if not UK)

Home Telephone

Mobile Telephone

E-mail Address [obligatory only for online applications]

Date of Birth [obligatory (and to be checked for validity) for junior memberships]

Grading Reference (6 digits followed by capital letter which acts as checkdigit)

Club [enter *None* if not applicable]

The following additional data must be stored for each member.

Membership Number allocated

Category of Membership

Expiry Date of Membership

Membership Organisation submitting this member's application

or Link to other Member administering this member's application

Any details necessary for the system to enable secure access by the member to their data as specified above

Notes: a memo field for use by the Federation to record miscellaneous information regarding the membership

The following data must be stored for each financial transaction recorded on the system.

Membership Number of beneficiary

Date of Transaction

Amount of Transaction

Mode of Payment

Cross-reference (e.g. PayPal reference, cheque number, &c)

Narrative (i.e. renewal or upgrade for which payment was made)

USE CASE 1

Individual Joining the Federation online

The user must be presented with a clear choice of available membership options.

The user should be given the opportunity to enter their grading reference and have the input screen pre-populated with data from their grading record.

The system must reject blank entries in required fields.

The system must reject demonstrably invalid entries in any field; specifically:

- Postcode must match a suitable pattern (e.g. one or two capital letters followed by one or two digits, an optional capital letter, a space, a digit, and two capital letters). Precise level of checking is negotiable; ideally at least the validity of the initial two capitals would be checked against the permissible values and the optional capital at the end of the outcode only permitted in the few areas or districts where it applies.
- Telephone numbers must be restricted to digits, spaces, and necessary punctuation for international numbers.
- e-mail address must be verified to contain an @ symbol; it is not necessary to carry out a DNS search for an MX record for the domain given.
- Dates must appear to be valid d/m/yy format which equates to an age at joining between 3 and 100.
- Grading reference must consist precisely of six digits followed by a capital letter between A and L. It is not essential that the calculation of the check character is validated.

The system must reject applications for junior membership when the applicant enters no date of birth or the date of birth entered implies an age 19 or over at the date of expiry of the period of membership applied for.

The grading reference input box should have a lookup button attached which, provided the user has entered surname and forename(s) will attempt a lookup on the ECF Grading Database, e.g. www.ecfgrading.org.uk/new/glist.php?&player=Thomas.?David.

If the lookup button is not used, the grading reference entered should be looked up on the ECF Grading Database (www.ecfgrading.org.uk/new/glist.php?&player=120253E) and any discrepancy of surname referred to the user, who may choose to ignore this. For reliability nothing other than the surname should be checked as the different styles of handling forenames and nicknames makes this unreliable.

Once a valid form submission has been made the system must ask whether the user wishes to apply for membership on behalf of any other individuals (Use Case 1a) or proceed to make payment for the existing applications. In the latter case the user must be passed to a secure payment screen meeting industry standard requirements.

The system must accept payment by at least credit card, debit card, and PayPal.

The system must prompt for all necessary details, including billing address of card where this is different to the address entered in the first completed application.

Once appropriate checks are completed and payment has been accepted the system must:

- store all necessary details of the payment.
- produce the necessary details for the member to securely log in to their account to edit details, upgrade, or in due course renew their membership.
- send a welcome e-mail to the member, a copy to be e-mailed to one or more administrative addresses; the e-mail must not communicate any user password created in the previous step.
- e-mail a summary of the transaction to one or more financial administrator addresses.

USE CASE 1a

Individual (e.g. Parent or Club Secretary) Making Membership Application for more than one Member

This is a sub-case of Use Case 1 and is dealt with therein.

USE CASE 2

Office Processing Membership Application with Card Details

This case applies when the office is processing a written application with card details or a telephone application. The case proceeds exactly as Use Case 1 except that generation of secure login credentials may be omitted. A welcome letter should be sent if an e-mail address is provided.

USE CASE 2a

Office Processing Postal Membership Application with Cheque

This proceeds exactly as Use Case 1 to the point at which a valid form submission has been made. In place of the secure payment screen the system must then proceed to a screen where details of the cheque can be entered. Generation of secure login credentials should be omitted. A welcome letter should be sent if an e-mail address is provided.

USE CASE 3

Office Processing Membership Organisation Submission

The user will have received a Excel spreadsheet in which each row corresponds to an individual joining or renewing through the membership organisation in question, and each column corresponds to one of the data items required, including level of membership. The precise layout of this spreadsheet is negotiable. The system must accept the identity of the Membership Organisation to which the submission relates from the user in some way, either within the spreadsheet or externally. The user will submit the spreadsheet to the system. The system must check the data on the spreadsheet for validity; if it is unable to process any data rows it must report that the submission is entirely rejected. If the system can determine that the basic format of the spreadsheet is correct but there are rows in which individual field values are invalid it should accept the remaining rows and indicate which rows have been rejected. Unless compliance with the preceding point is deemed impractical then the system **must** ignore any row which requests that a member join or renew in a category of membership which they already hold for the current period. This is to permit a partially incorrect submission to be resubmitted after correction of errors without deleting the lines which were accepted. The system must not make any assumption that a member will renew in the category of membership they held in the previous year. On successfully processing all or part of the submission the system must generate payment records for each membership taken out or renewed, showing the Membership Organisation responsible for payment. The system must then produce a report to the user showing the number of members taking out membership or renewing in each membership category, together with a statement of the charge for those memberships. (* see below) The system must ensure that for reporting purposes the individuals registered by each Membership Organisation can be identified. Conversely, for the same purposes, for each member the registered through a Membership Organisation that fact and the identity of the particular Membership Organisation must be identified. This information must not be carried forward from year to year unless the member again renews through the same Membership Organisation.

USE CASE 3a

Membership Organisation Submission (alternative scenario)

As an alternative to the previous use case, the system may provide a system where an official of the Membership Organisation may log in and submit the spreadsheet directly to the system. In this case, a copy of the post-processing report (note * above) must be e-mailed to an administrator when it is made available to the user making the submission.

USE CASE 4

Existing Member Logging on to the Online System

Member should log on using whatever secure method has been configured.

Should the member have forgotten their password a reset facility must be provided; this must meet industry standard security standards and must not involve sending a clear-text password by e-mail.

Once the user has authenticated the system must determine the purpose for which the user has logged on. The following possibilities exist:

- if the member is not a member for the current year they must be renewing their membership (Use Case 5);
- if the member is a member for the current year but memberships for the following year are on sale they may (unless their existing membership is Platinum) wish to renew in advance (Use Case 5), upgrade their membership (Use Case 6), or merely update their details (Use Case 7);
- if the member is a member for the current year and memberships for the following year are not yet on sale they may (unless their existing membership is Platinum) wish to upgrade their membership (Use Case 6), or merely update their details (Use Case 7).

USE CASE 5

Individual Renewing Their Membership Online

The user must log on to the system as describe in Use Case 4.

The system should offer a choice of appropriate membership categories for the member to renew in: junior members must be offered junior categories; adult members, including those of unknown age or those just turned 18 must be offered adult categories.

The member should select the category of membership in which they wish to renew; the system must not make the user jump through hoops to change membership category.

The system should offer the member's stored details for confirmation or editing (see Use Case 7).

On confirmation of the stored details, or submission of edited details, the system must ask whether the user wishes to renew the membership of any other member whose membership they already administer or proceed to make payment for the existing applications. In the latter case the user must be passed to a secure payment screen meeting industry standard requirements, which will function in a comparable manner to the description in Use Case 1.

USE CASE 6

Individual Upgrading Their Membership Category

The user must log on to the system as describe in Use Case 4.

Once the system has determined that the user wishes to upgrade their existing membership it must offer a choice of upgrade options available.

Upgrade is limited to higher categories: Bronze to Silver, Gold, or Platinum; Silver to Gold or Platinum; Gold to Platinum.

The system should offer the member's stored details for confirmation or editing (see Use Case 7).

On confirmation of the stored details, or submission of edited details, the system must ask whether the user wishes to upgrade the membership of any other member whose membership they already administer or proceed to make payment for the existing applications. In the latter case the user must be passed to a secure payment screen meeting industry standard requirements, which will function in a comparable manner to the description in Use Case 1.

USE CASE 7

Individual Editing Their Membership Details

The user must have logged on to the system as describe in Use Case 4.

This use case may apply as a direct outcome of Use Case 4, or arise during the processing of Use Case 5 or 6.

Once the system has determined that the user wishes to edit their membership details it should present the current stored details for editing.

The checks carried out to determine the acceptability of the data entered are to be identical to those referred to for acceptance of initial entries in Use Case 1. However, the check of grading reference against ECF Grading Database should not be carried out if the grading reference is not edited.

The action of the system on submission of a valid form should be according to Use Case 4, 5 or 6 depending on the context in which the edit details form was opened.

REPORTS

Daily List

This list is to be produced daily overnight for publication on the Federation's website for the use of organisers, administrators, and others. The displayed fields are to be:

- Membership category
- Membership number
- Surname
- Forename(s)
- Grading reference
- Expiry date of membership

Mailing List

This list is to be produced on demand for transfer to the Federations independent opt-in mailing software. The exported fields are to be:

- Membership category
- Membership number
- Title
- Surname
- Forename(s)
- E-mail address

Members for whom there is no e-mail address stored are to be excluded from this list.

Address List

This list is to be produced on demand for postal contact of members without e-mail addresses. The exported fields are to be:

- Membership category
- Membership number
- Title
- Surname
- Forename(s)
- Address (all lines in sequence)
- Town
- County
- Postcode

Transaction List

This list is to be produced for transfer to the Federations independent opt-in mailing software. The exported fields are expected to be:

- Membership category
- Membership number
- Surname
- Forename(s)

- Transaction Date
- Transaction Amount
- Transaction Mode
- Transaction Cross Reference
- Transaction Narrative

The precise format of this list must be suitable for interfacing with the Federation's accounting software. It is not clear at the time of writing whether this list should be producible on demand, or automatically e-mailed to a supplied e-mail address weekly. In the former case it would be necessary for the start and end dates of the period to which the report referred to be configurable.

New Members List

This list is to be produced for the purpose of updating the Federation's Grading Database with details of new members. The exported fields are to be:

- Membership category
- Membership number
- Surname
- Forename(s)
- Address (all lines in sequence)
- Town
- County
- Postcode
- Grading Reference
- Club

This list should be automatically e-mailed to the Grading Database Administrator each week, covering the period since the last such list was generated.

RENEWAL NOTICES

E-mail notices

This system should generate on demand e-mail renewal notices to all members whose memberships are expiring at the end of the current season for whom an e-mail address is held.

No renewal notice is to be sent to any member who has joined through a Membership Organisation.

The renewal notice sent to holders of expiring free junior silver memberships must differ from those whose paid memberships are expiring.

The text of the renewal notice must include reference to the membership rates for the coming year. It must therefore be possible for this to be readily edited by administrators.

Postal notices

This system should generate on demand a list of postal addresses of members whose memberships are expiring at the end of the current season for whom no e-mail address is held so that postal reminders can be sent to such members.

The list must exclude any member who has joined through a Membership Organisation.

Reminders

This system should generate on demand e-mail reminders to all members whose memberships expired at the end of the previous season and who have not yet renewed for whom an e-mail address is held.

No reminder is to be sent to any member who has joined through a Membership Organisation.

The reminder sent to holders of expiring free junior silver memberships must differ from those whose paid memberships are expiring.

The text of the renewal notice may include reference to the membership rates for the coming year. It must therefore be possible for this to be readily edited by administrators.

It is not the Federation's current policy to send reminders by post to those members who have not renewed and have not supplied us with an e-mail address.