

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using System.IO;
using Microsoft.Win32;
using System.Media;

namespace RememberEachWord
{
    public partial class Form1 : Form
    {
        public int WordCount = 6;
        private int roundCounter = 0;
        private REWRound currentRound = null;
        private Font visFont = null;
        private Font unvFont = null;
        private Color visCol = Color.Black;
        private Color unvCol = Color.Gray;
        public static bool saved = true;
        private string filename = "";
        private bool secondScreen = false;
        private SoundPlayer sp;

        private string FileName
        {
            get
            {
                return filename;
            }
            set
            {
                filename = value;
                wf.Text = "Editor - " + filename;
            }
        }

        private bool Saved
        {
            get
            {
                return saved;
            }
            set
            {
                saved = value;
                if (saved)
                {
                    wf.Text = "Editor - " + filename;
                }
                else
                {
                    wf.Text = "Editor - " + filename + "*";
                }
            }
        }

        WordsForm wf = new WordsForm();
        WordsForm pf = new WordsForm();
        public Form1()
        {
            InitializeComponent();

            RegistryLoad();

            WordCount = wf.WordCount;
            currentRound = new REWRound("current", WordCount);

            wf.Edit = false;
            wf.Move += wf_Move;
        }
    }
}
```

```

        wf.WordFieldChanged += wf_WordFieldChanged;
        wf.KeyDown += wf_KeyDown;
        wf.Show();
        wf.StoreOrigParameters();

        pf.Edit = false;
        pf.Text = "Show";
        pf.FormBorderStyle = System.Windows.Forms.FormBorderStyle.Sizable;
        pf.BackColor = Color.Black;
        pf.KeyDown += pf_KeyDown;
        pf.Show();
        pf.StoreOrigParameters();

        timer1.Start();

        sp = new SoundPlayer(Properties.Resources.Ding);
    }

    private void RegistryLoad()
    {
        //----- Загрузка из реестра!!!! -----
        RegistryKey currentUserKey = Registry.CurrentUser;
        RegistryKey softwareKey = currentUserKey.OpenSubKey("Software", true);
        RegistryKey subSoftwareKey = softwareKey.OpenSubKey("RememberEachWord", true);

        if (subSoftwareKey == null)
        {
            subSoftwareKey = softwareKey.CreateSubKey("RememberEachWord");

            subSoftwareKey.SetValue("VisibleFontName", "Impact");
            subSoftwareKey.SetValue("VisibleFontSize", 28.0f);
            subSoftwareKey.SetValue("VisibleFontStyle", (int)FontStyle.Bold);
            subSoftwareKey.SetValue("VisibleFontColor", Color.Black.ToArgb());

            subSoftwareKey.SetValue("UnvisibleFontName", "Impact");
            subSoftwareKey.SetValue("UnvisibleFontSize", 28.0f);
            subSoftwareKey.SetValue("UnvisibleFontStyle", (int)FontStyle.Regular);
            subSoftwareKey.SetValue("UnvisibleFontColor", Color.Gray.ToArgb());
        }

        string name = (string)subSoftwareKey.GetValue("VisibleFontName");
        float size = float.Parse(subSoftwareKey.GetValue("VisibleFontSize").ToString());
        FontStyle fs = (FontStyle)(int)subSoftwareKey.GetValue("VisibleFontStyle");
        Color cl = Color.FromArgb((int)subSoftwareKey.GetValue("VisibleFontColor"));
        visFont = new Font(name, size, fs);
        visCol = cl;

        name = (string)subSoftwareKey.GetValue("UnvisibleFontName");
        size = float.Parse(subSoftwareKey.GetValue("UnvisibleFontSize").ToString());
        fs = (FontStyle)(int)subSoftwareKey.GetValue("UnvisibleFontStyle");
        cl = Color.FromArgb((int)subSoftwareKey.GetValue("UnvisibleFontColor"));
        unvFont = new Font(name, size, fs);
        unvCol = cl;

        subSoftwareKey.Close();
        softwareKey.Close();

        wf.VisFont = visFont;
        wf.UnvFont = unvFont;
        wf.VisColor = visCol;
        wf.UnvColor = unvCol;
        pf.VisFont = visFont;
        pf.UnvFont = unvFont;
        pf.VisColor = visCol;
        pf.UnvColor = unvCol;
        //-----
    }

    private void Form1_FormClosing(object sender, FormClosingEventArgs e)
    {
        if (!saved)
        {
            System.Windows.Forms.DialogResult dr = MessageBox.Show("Save this project?", "Project is not saved!", MessageBoxButtons.YesNoCancel);

```

```
        if (dr == System.Windows.Forms.DialogResult.Yes)
        {
            saveGameToolStripMenuItem_Click(sender, e);
        }
        else if (dr == System.Windows.Forms.DialogResult.Cancel)
        {
            e.Cancel = true;
            return;
        }
    }

    RegistrySave();
}

private void RegistrySave()
{
    RegistryKey currentUserKey = Registry.CurrentUser;
    RegistryKey softwareKey = currentUserKey.OpenSubKey("Software", true);
    RegistryKey subSoftwareKey = softwareKey.OpenSubKey("RememberEachWord", true);

    subSoftwareKey = softwareKey.CreateSubKey("RememberEachWord");

    subSoftwareKey.SetValue("VisibleFontName", visFont.Name);
    subSoftwareKey.SetValue("VisibleFontSize", visFont.Size);
    subSoftwareKey.SetValue("VisibleFontStyle", (int)visFont.Style);
    subSoftwareKey.SetValue("VisibleFontColor", visCol.ToArgb());

    subSoftwareKey.SetValue("UnvisibleFontName", unvFont.Name);
    subSoftwareKey.SetValue("UnvisibleFontSize", unvFont.Size);
    subSoftwareKey.SetValue("UnvisibleFontStyle", (int)unvFont.Style);
    subSoftwareKey.SetValue("UnvisibleFontColor", unvCol.ToArgb());

    subSoftwareKey.Close();
    softwareKey.Close();
}

void pf_KeyDown(object sender, KeyEventArgs e)
{
    Form1_KeyDown(sender, e);
}

void wf_KeyDown(object sender, KeyEventArgs e)
{
    Form1_KeyDown(sender, e);
}

void wf_WordFieldChanged(object sender, WordEditorFieldEventArgs e)
{
    // Изменения в редакторе
    currentRound.SetAt(e.Text, e.State, e.Index);
    if (autosaveChangesToolStripMenuItem.Checked)
    {
        int sel = listBox1.SelectedIndex;

        if (sel >= 0)
        {
            (listBox1.Items[sel] as REWRound).SetAt(e.Text, e.State, e.Index);
        }
    }

    RefreshWordForm();

    if (toolStripMenuItem4.Checked)
    {
        sp.Play();
    }

    Saved = false;
}

void wf_Move(object sender, EventArgs e)
{
    Point loc = (sender as WordsForm).Location;
    this.Location = new Point(loc.X - this.Width, loc.Y);
}
```

```

    }

    private void newRoundToolStripMenuItem_Click(object sender, EventArgs e)
    {
        roundCounter++;
        REWRound rr = new REWRound("Round " + roundCounter.ToString(), WordCount);
        listBox1.Items.Add(rr);
        listBox1.SelectedIndex = listBox1.Items.Count - 1;

        Saved = false;
    }

    private void insertRoundToolStripMenuItem_Click(object sender, EventArgs e)
    {
        roundCounter++;
        REWRound rr = new REWRound("Round " + roundCounter.ToString(), WordCount);
        if (listBox1.SelectedIndex >= 0)
        {
            int sel = listBox1.SelectedIndex;
            listBox1.Items.Insert(sel, rr);
            listBox1.SelectedIndex = sel;
        }
        else
        {
            listBox1.Items.Add(rr);
            listBox1.SelectedIndex = listBox1.Items.Count - 1;
        }

        Saved = false;
    }

    private void deleteRoundToolStripMenuItem_Click(object sender, EventArgs e)
    {
        if (listBox1.SelectedIndex >= 0)
        {
            int sel = listBox1.SelectedIndex;
            listBox1.Items.RemoveAt(sel);
            if (sel >= listBox1.Items.Count)
            {
                sel--;
            }
            if (sel >= 0)
            {
                listBox1.SelectedIndex = sel;
            }
        }

        Saved = false;
    }

    private void storeRoundToolStripMenuItem_Click(object sender, EventArgs e)
    {
        int sel = listBox1.SelectedIndex;

        if (sel >= 0)
        {
            //(listBox1.Items[sel] as REWRound).SetAt(e.Text, e.State, e.Index);
            for (int i = 0; i < WordCount; i++)
            {
                (listBox1.Items[sel] as REWRound).SetAt(currentRound.GetTxtAt(i), currentRound.GetStateAt
(i), i);
            }
        }
    }

    private void listBox1_MouseDoubleClick(object sender, MouseEventArgs e)
    {
        if (listBox1.SelectedIndex >= 0)
        {
            int sel = listBox1.SelectedIndex;
            RoundNameDialog rnd = new RoundNameDialog();
            rnd.RoundName = listBox1.Items[sel].ToString();
            if (rnd.ShowDialog() == System.Windows.Forms.DialogResult.OK)
            {

```

```

        REWRound rr = (REWRound)listBox1.Items[sel];
        rr.RoundName = rnd.RoundName;
        listBox1.Items[sel] = rr;
    }

    Saved = false;
}

// ----- Drag & Drop -----
private Rectangle dragBoxFromMouseDown;
private int rowIndexFromMouseDown;
private int rowIndexOfItemUnderMouseToDrop;

private void listBox1_MouseMove(object sender, MouseEventArgs e)
{
    if ((e.Button & MouseButtons.Left) == MouseButtons.Left)
    {
        // If the mouse moves outside the rectangle, start the drag.
        if (dragBoxFromMouseDown != Rectangle.Empty &&
            !dragBoxFromMouseDown.Contains(e.X, e.Y))
        {
            // Proceed with the drag and drop, passing in the list item.
            DragDropEffects dropEffect = listBox1.DoDragDrop(
                listBox1.Items[rowIndexFromMouseDown],
                DragDropEffects.Move);
        }
    }
}

private void listBox1_MouseDown(object sender, MouseEventArgs e)
{
    // Get the index of the item the mouse is below.
    rowIndexFromMouseDown = listBox1.IndexFromPoint(e.X, e.Y);
    if (rowIndexFromMouseDown != -1)
    {
        // Remember the point where the mouse down occurred.
        // The DragSize indicates the size that the mouse can move
        // before a drag event should be started.
        Size dragSize = SystemInformation.DragSize;

        // Create a rectangle using the DragSize, with the mouse position being
        // at the center of the rectangle.
        dragBoxFromMouseDown = new Rectangle(new Point(e.X - (dragSize.Width / 2),
            e.Y - (dragSize.Height / 2)),
            dragSize);
    }
    else
        // Reset the rectangle if the mouse is not over an item in the ListBox.
        dragBoxFromMouseDown = Rectangle.Empty;
}

private void listBox1_DragOver(object sender, DragEventArgs e)
{
    e.Effect = DragDropEffects.Move;
}

private void listBox1_DragDrop(object sender, DragEventArgs e)
{
    // The mouse locations are relative to the screen, so they must be
    // converted to client coordinates.
    Point clientPoint = listBox1.PointToClient(new Point(e.X, e.Y));

    // Get the row index of the item the mouse is below.
    rowIndexOfItemUnderMouseToDrop = listBox1.IndexFromPoint(clientPoint.X, clientPoint.Y);
    if (rowIndexOfItemUnderMouseToDrop < 0) rowIndexOfItemUnderMouseToDrop = listBox1.Items.Count - 1;

    // If the drag operation was a move then remove and insert the row.
    if (e.Effect == DragDropEffects.Move)
    {
        REWRound rowToMove = e.Data.GetData(
            typeof(REWRound)) as REWRound;
    }
}

```

```
        listBox1.Items.RemoveAt(rowIndexFromMouseDown);
        listBox1.Items.Insert(rowIndexOfItemUnderMouseToDrop, rowToMove);
        listBox1.SelectedIndex = rowIndexOfItemUnderMouseToDrop;
    }

    Saved = false;
}

//-----

private void showHideToolStripMenuItem_Click(object sender, EventArgs e)
{
    if (pf.Visible)
    {
        pf.Hide();
    }
    else
    {
        pf.Show();
    }
}

private void Form1_Move(object sender, EventArgs e)
{
    wf.Location = new Point(this.Location.X + this.Width, this.Location.Y);
}

private void listBox1_SelectedIndexChanged(object sender, EventArgs e)
{
    int sel = listBox1.SelectedIndex;

    if (sel >= 0)
    {
        wf.Edit = true;

        // Загрузка данных раунда
        REWRound rr = listBox1.Items[sel] as REWRound;

        for (int i = 0; i < WordCount; i++)
        {
            currentRound.SetAt(rr.GetTxtAt(i), rr.GetStateAt(i), i);
        }
    }
    else
    {
        wf.Edit = false;

        // Очистка данных раунда
        for (int i = 0; i < WordCount; i++)
        {
            currentRound.SetAt("", false, i);
        }
    }

    RefreshEditor();
    RefreshWordForm();
}

private void RefreshEditor()
{
    for (int i = 0; i < WordCount; i++)
    {
        wf.SetItemState(currentRound.GetStateAt(i), i);
        wf.SetItemText(currentRound.GetTxtAt(i), i);
    }
}

private void RefreshWordForm()
{
    // RefreshWordForm()

    for (int i = 0; i < WordCount; i++)
    {
        pf.SetItemState(currentRound.GetStateAt(i), i);
    }
}
```

```

        pf.SetItemText(currentRound.GetTxtAt(i), i);
    }
}

private void visibleFontToolStripMenuItem_Click(object sender, EventArgs e)
{
    FontDialog fd = new FontDialog();
    fd.Font = visFont;
    fd.Color = visCol;
    fd.ShowColor = true;
    if (fd.ShowDialog() == System.Windows.Forms.DialogResult.OK)
    {
        visFont = fd.Font;
        wf.VisFont = visFont;
        pf.VisFont = visFont;

        visCol = fd.Color;
        wf.VisColor = visCol;
        pf.VisColor = visCol;

        Saved = false;
    }
}

private void invisibleFontToolStripMenuItem_Click(object sender, EventArgs e)
{
    FontDialog fd = new FontDialog();
    fd.Font = unvFont;
    fd.Color = unvCol;
    fd.ShowColor = true;
    if (fd.ShowDialog() == System.Windows.Forms.DialogResult.OK)
    {
        unvFont = fd.Font;
        wf.UnvFont = unvFont;
        pf.UnvFont = unvFont;

        unvCol = fd.Color;
        wf.UnvColor = unvCol;
        pf.UnvColor = unvCol;

        Saved = false;
    }
}

//_____ MENU File _____
private void newGameToolStripMenuItem_Click(object sender, EventArgs e)
{
    if (!saved)
    {
        System.Windows.Forms.DialogResult dr = MessageBox.Show("Save this project?", "Project is not saved!", MessageBoxButtons.YesNoCancel);
        if (dr == System.Windows.Forms.DialogResult.Yes)
        {
            saveGameToolStripMenuItem_Click(sender, e);
        }
        else if (dr == System.Windows.Forms.DialogResult.Cancel) return;
    }

    roundCounter = 0;
    listBox1.Items.Clear();
    wf.ClearForm();
    pf.ClearForm();
    wf.Edit = false;
    pf.Edit = false;

    //RegistryLoad();

    Saved = true;
}

private void saveGameToolStripMenuItem_Click(object sender, EventArgs e)
{
    if ((filename == "") || (!File.Exists(filename)))
    {

```

```

        saveGameAsToolStripMenuItem_Click(sender, e);
    }
    else
    {
        SaveProject();
    }
}

private void saveGameAsToolStripMenuItem_Click(object sender, EventArgs e)
{
    SaveFileDialog sfd = new SaveFileDialog();
    sfd.Filter = "RemEWord files (*.rew)|*.rew";
    sfd.DefaultExt = "rew";
    sfd.AddExtension = true;
    if ((filename != "") && (File.Exists(filename)))
    {
        sfd.FileName = filename;
    }
    if (sfd.ShowDialog() == System.Windows.Forms.DialogResult.OK)
    {
        FileName = sfd.FileName;
        SaveProject();
    }
}

private void openGameToolStripMenuItem_Click(object sender, EventArgs e)
{
    if (!saved)
    {
        System.Windows.Forms.DialogResult dr = MessageBox.Show("Save this project?", "Project is not saved!",
        saved!", MessageBoxButtons.YesNoCancel);
        if (dr == System.Windows.Forms.DialogResult.Yes)
        {
            saveGameToolStripMenuItem_Click(sender, e);
        }
        else if (dr == System.Windows.Forms.DialogResult.Cancel) return;
    }

    OpenFileDialog ofd = new OpenFileDialog();
    ofd.Filter = "RemEWord files (*.rew)|*.rew";
    if (ofd.ShowDialog() == System.Windows.Forms.DialogResult.OK)
    {
        FileName = ofd.FileName;
        OpenProject();
    }
}

private void reloadCurrentGameCtrlRToolStripMenuItem_Click(object sender, EventArgs e)
{
    if ((filename != "") && (File.Exists(filename)))
    {
        OpenProject();
    }
}

private void SaveProject()
{
    ProjFileStream pfs = new ProjFileStream(filename, FileMode.Create, FileAccess.Write);

    WriteFont(visFont, visCol, pfs); // Видимый шрифт
    WriteFont(unvFont, unvCol, pfs); // Невидимый шрифт
    pfs.WriteInt(WordCount); // Количество слов. Должно совпадать при загрузке!
    pfs.WriteInt(listBox1.Items.Count); // Количество заданий
    for (int i = 0; i < listBox1.Items.Count; i++)
    {
        REWRound.SaveRound((REWRound)listBox1.Items[i], pfs);
    }

    pfs.Close();

    Saved = true;
}

private void OpenProject()

```



```

{
    listBox1.Items.Clear();
    wf.ClearForm();
    pf.ClearForm();

    ProjFileStream pfs = new ProjFileStream(filename, FileMode.Open, FileAccess.Read);

    // Видимый шрифт
    visFont = ReadFont(pfs, ref visCol);
    wf.VisFont = visFont;
    pf.VisFont = visFont;
    wf.VisColor = visCol;
    pf.VisColor = visCol;

    // Невидимый шрифт
    unvFont = ReadFont(pfs, ref unvCol);
    wf.UnvFont = unvFont;
    pf.UnvFont = unvFont;
    wf.UnvColor = unvCol;
    pf.UnvColor = unvCol;

    // Количество слов. Должно совпадать!
    int localWC = pfs.ReadInt();

    // Количество заданий
    int localCNT = pfs.ReadInt();
    roundCounter = localCNT;
    for (int i = 0; i < localCNT; i++)
    {
        listBox1.Items.Add(REWRound.LoadRound(pfs, localWC, WordCount));
    }

    if (listBox1.Items.Count > 0) listBox1.SelectedIndex = 0;

    pfs.Close();

    Saved = true;
}

private void WriteFont(Font fnt, Color cl, ProjFileStream pfs)
{
    pfs.WriteString(fnt.Name);
    pfs.WriteFloat(fnt.Size);
    pfs.WriteInt((int)fnt.Style);
    pfs.WriteInt((int)fnt.Unit);
    pfs.WriteByte(fnt.GdiCharSet);
    pfs.WriteBool(fnt.GdiVerticalFont);
    pfs.WriteColor(cl);
}

private Font ReadFont(ProjFileStream pfs, ref Color col)
{
    string name = pfs.ReadString();
    float size = pfs.ReadFloat();
    FontStyle fs = (FontStyle)pfs.ReadInt();
    GraphicsUnit gu = (GraphicsUnit)pfs.ReadInt();
    byte cs = pfs.ReadByte();
    bool vf = pfs.ReadBool();
    col = pfs.ReadColor();
    return new System.Drawing.Font(name, size, fs, gu, cs, vf);
}

// -----
//----- Hot Keys -----
private void Form1_KeyDown(object sender, KeyEventArgs e)
{
    //int sel;
    //MessageBox.Show(e.KeyCode.ToString());
    if (e.Control)
    {
        switch (e.KeyCode)
        {
            case Keys.N:
                newGameToolStripMenuItem_Click(sender, new EventArgs());
        }
    }
}

```

```

        break;
    case Keys.S:
        if (e.Shift)
        {
            saveGameAsToolStripMenuItem_Click(sender, new EventArgs());
        }
        else
        {
            saveGameToolStripMenuItem_Click(sender, new EventArgs());
        }
        break;
    case Keys.O:
        openGameToolStripMenuItem_Click(sender, new EventArgs());
        break;
    case Keys.R:
        reloadCurrentGameCtrlRToolStripMenuItem_Click(sender, new EventArgs());
        break;
    case Keys.Add:
        newRoundToolStripMenuItem_Click(sender, new EventArgs());
        break;
    case Keys.Insert:
        insertRoundToolStripMenuItem_Click(sender, new EventArgs());
        break;
    case Keys.Delete:
        deleteRoundToolStripMenuItem_Click(sender, new EventArgs());
        break;
    case Keys.M:
        storeRoundToolStripMenuItem_Click(sender, new EventArgs());
        break;
    case Keys.A:
        autosaveChangesToolStripMenuItem.Checked = !autosaveChangesToolStripMenuItem.Checked;
        string answ = (autosaveChangesToolStripMenuItem.Checked) ? "YES" : "NO";
        MessageBox.Show("Autosave Round Parameter was switched to - " + answ);
        break;
    case Keys.Enter:
        toolStripMenuItem3.Checked = !toolStripMenuItem3.Checked;
        break;
    case Keys.P:
        toolStripMenuItem4.Checked = !toolStripMenuItem4.Checked;
        if (toolStripMenuItem4.Checked)
        {
            MessageBox.Show("Sound is On");
        }
        else
        {
            MessageBox.Show("Sound is Off");
        }
        break;
    }
}
else
{
    switch (e.KeyCode)
    {
        case Keys.Oemtilde:
            if (pf.Visible)
            {
                pf.Hide();
            }
            else
            {
                pf.Show();
            }
            break;
        //case Keys.Up:
        //    sel = listBox1.SelectedIndex;
        //    if (sel >= 0)
        //    {
        //        sel--;
        //        if (sel >= 0) listBox1.SelectedIndex = sel;
        //    }
        //    break;
        //case Keys.Down:
        //    sel = listBox1.SelectedIndex;

```

```

        // if (sel >= 0)
        // {
        //     sel++;
        //     if (sel < listBox1.Items.Count) listBox1.SelectedIndex = sel;
        // }
        // break;
        case Keys.F1:
            visibleFontToolStripMenuItem_Click(sender, new EventArgs());
            break;
        case Keys.F2:
            unvisibleFontToolStripMenuItem_Click(sender, new EventArgs());
            break;
    }
}

private void timer1_Tick(object sender, EventArgs e)
{
    if (Screen.AllScreens.Length > 1) // Следим за состоянием второго экрана
    {
        if (!secondScreen)
        {
            secondScreen = true;
            toolStripMenuItem3.Enabled = true;
        }
    }
    else
    {
        if (secondScreen)
        {
            secondScreen = false;
            toolStripMenuItem3.Enabled = false;

            if (toolStripMenuItem3.Checked)
            {
                toolStripMenuItem3.Checked = false;
                //
                Point p = new Point(0, 0);
                Size s = new Size(400, 300);
                pf.FormBorderStyle = FormBorderStyle.Sizable;
                pf.Location = p;
                pf.Size = s;
            }
        }
    }
}

private void toolStripMenuItem3_CheckedChanged(object sender, EventArgs e)
{
    if (secondScreen && toolStripMenuItem3.Checked)
    {
        Screen scr = Screen.AllScreens[1];
        Point p = new Point(scr.Bounds.Location.X, scr.Bounds.Location.Y);
        Size s = scr.Bounds.Size;
        pf.FormBorderStyle = FormBorderStyle.None;
        pf.Location = p;
        pf.Size = s;
    }
    else
    {
        Point p = new Point(0, 0);
        Size s = new Size(400, 300);
        pf.FormBorderStyle = FormBorderStyle.Sizable;
        pf.Location = p;
        pf.Size = s;
    }
}
}
}

```