

BSCSE



Project Title: **ATOMIC** **DICTIONARY**

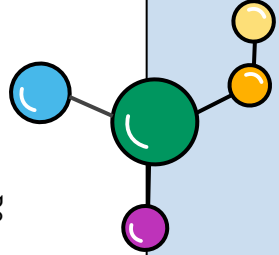
Course Title: **OBJECT** **ORIENTED** **PROGRAMMING**



Submitted To:

Samia Yasmin
Lecturer

Department of Computer Science & Engineering
Uttara University, Bangladesh





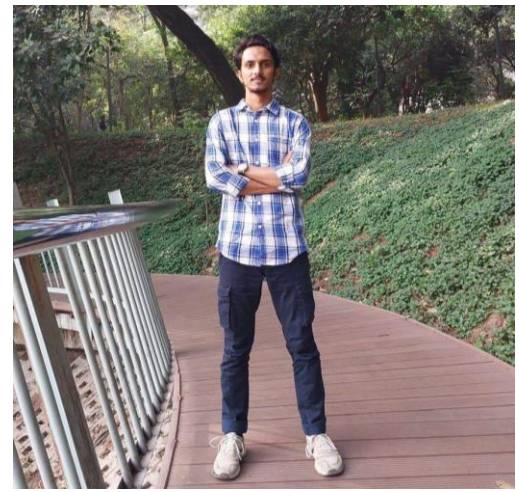
OUR TEAM

LUTFUN NAHAR BARSHA



ID: 2233081 334
BATCH : 60
SECTION : I

MD. RIAD HASAN

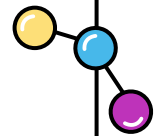
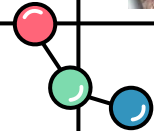


ID: 2233081 332
BATCH : 60
SECTION : I

MD. KOWSER MAHMOOD



ID: 2233081 349
BATCH : 60
SECTION : I



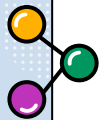


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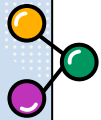


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The background is a light blue gradient. On the left, there is a large, stylized 'OI' in blue. To the right, there is a stylized atom with a central nucleus and three elliptical orbits containing yellow, red, and orange dots. Below the atom, there are several circular clusters of small white dots. In the bottom left, there is a molecular structure with a central orange sphere connected to a purple sphere, a blue sphere, and a yellow sphere. A green sphere is also connected to the orange one. A thin black line connects the green sphere to the text box.

OI

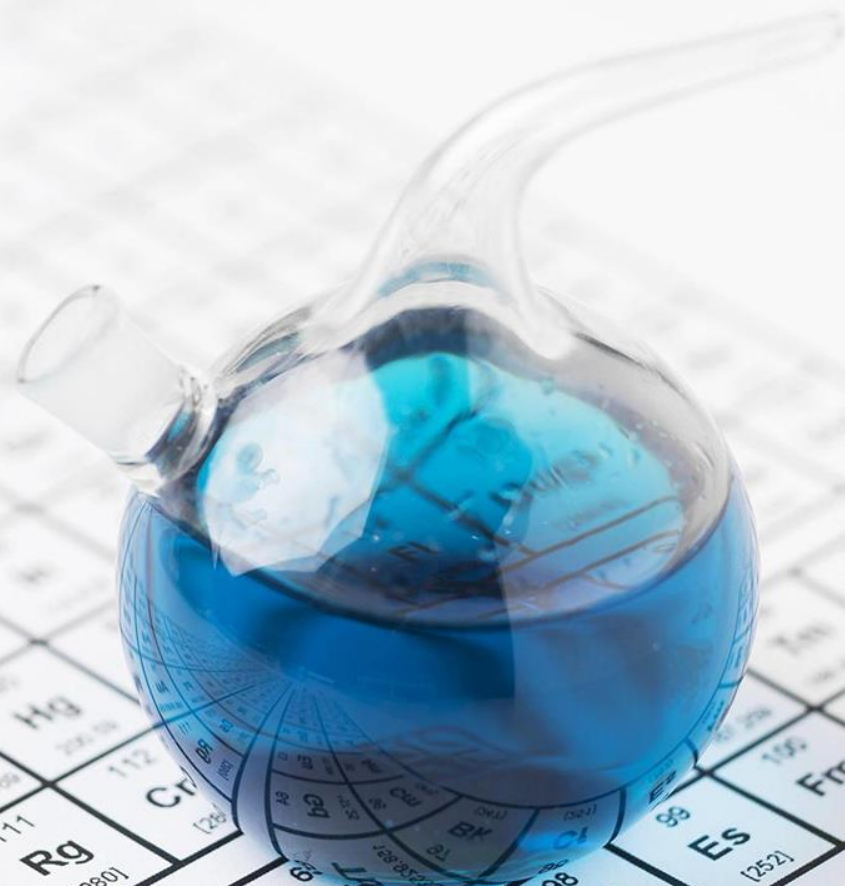
INTRODUCTION

The **Atomic Dictionary** is a desktop app that helps users quickly find information about elements. By entering an element's name or symbol, users can easily access its details. This project makes learning about the periodic table simple and efficient. It is referenced by Modern Periodic Table.



History:

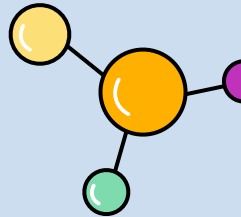
The modern periodic table is credited to **Dmitri Mendeleev**, who created the first version in 1869, and **Henry Moseley**, who later refined it by arranging elements based on atomic number rather than atomic mass.



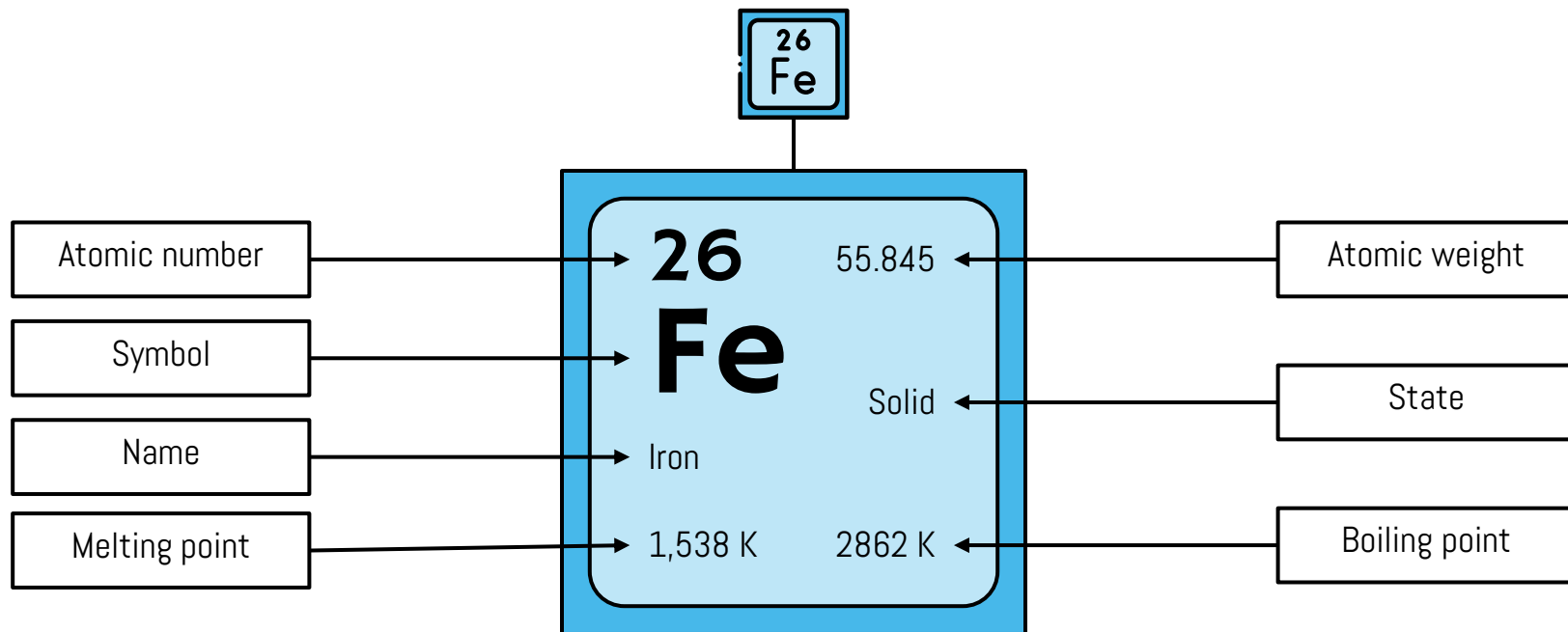
02

OBJECTIVES

- ☐ To create an easy-to-use app for exploring the periodic table.
- ☐ To provide accurate and detailed information about elements in one tap.
- ☐ To improve skills in software development using C# as well.



THE KEY INFORMATIONS THAT WE'LL PROVIDE



03

FEATURES

- ☐ Search for elements by name or symbol.
- ☐ View detailed information like atomic number, weight, and group.
- ☐ Easy navigation with a simple and user-friendly interface.
- ☐ Works as a standalone app without extra software.

04

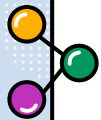
SOFTWARE AND TOOLS

- ❑ Programming Language: C#
- ❑ Development Environment: Visual Studio Community 2022
- ❑ Reference: Periodic Table Data



Visual Studio 2022
Community Edition



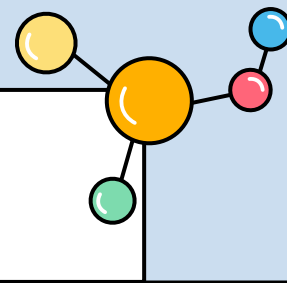


THE MODERN PERIODIC TABLE

1 H																	2 He
3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne
11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
55 Cs	56 Ba	71 Lu	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
87 Fr	88 Ra	103 Lr	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Cn	113 Nh	114 Fl	115 Mc	116 Lv	117 Ts	118 Og
		57 La	58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb		
		89 Ac	90 Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No		

05

PROJECT DESIGN



We have two forms for the project.

Form 1: Takes input from User.

Form 2: Provides output for the particular atom.

It has Navigation Workflow like, Keyboard shortcuts for quick actions (Enter to search, Esc to return).

ATOMIC DICTIONARY

Enter Atom's Name or Symbol :

Uranium

FIND ATOM

PoweredBy "Riad's Tutorial"

ATOM INFORMATION

HOME

Name: Uranium
Symbol: U
State: Solid
Atomic Number: 92
Atomic Mass: 238.03
Group: 6
Period: 7
Electron Configuration: [Rn] 5f3 6d1 7s2
Melting Point: 1135 K
Boiling Point: 4131 K
Valency: 6
Radioactive Status : Radioactive

Reference : Modern Periodic Table

PROJECT DESIGN : Outputs

ATOMIC DICTIONARY

Enter Atom's Name or Symbol :

au

[FIND ATOM](#)

PoweredBy "Riad's Tutorial"

ATOM INFORMATION

Name: Au
Symbol: Gold
State: Solid
Atomic Number: 79
Atomic Mass: 196.97
Group: 11
Period: 6
Electron Configuration: [Xe] 4f14 5d10 6s1
Melting Point: 1063 K
Boiling Point: 2856 K
Valency: 1
Radioactive Status: Safe

[HOME](#)

Reference : Modern Periodic Table

ATOMIC DICTIONARY

Enter Atom's Name or Symbol :

xyz

[FIND ATOM](#)

PoweredBy "Riad's Tutorial"

ATOM INFORMATION

ATOM NOT FOUND!!!!

[HOME](#)

Reference : Modern Periodic Table

ATOMIC DICTIONARY

Enter Atom's Name or Symbol :

[FIND ATOM](#)

PoweredBy "Riad's Tutorial"

ATOM INFORMATION

PLEASE INSERT AN ATOM'S NAME OR SYMBOL.

[HOME](#)

Reference : Modern Periodic Table



06

CHALLENGES FACED

- ☐ Form Navigation Issue
- ☐ Data Retention in Input Field
- ☐ Deployment
- ☐ Key Functionality

07

FUTURE PLANS

- ☐ Develop the Atomic Dictionary for Android devices.
- ☐ Implement an auto-suggest feature in the input box to help users find elements faster.

08

CONCLUSION

That's all about our project. We tried to make it more smooth and user-friendly. We are now in initial stage but hoping to do better with our future plans on this project.

The background is a light blue color with a network of thin white lines connecting various colored circles. The circles are in shades of orange, green, blue, pink, and yellow. Some circles are larger than others, and some are connected to multiple lines, creating a web-like structure. There are also some faint, dotted circular patterns in the background.

THANKS

Do you have any questions?

A light gray rectangular box is positioned below the text "Do you have any questions?".