

Міністерство освіти і науки України  
Національний технічний університет України «Київський політехнічний  
інститут імені Ігоря Сікорського»  
Факультет інформатики та обчислювальної техніки  
Кафедра інформатики та програмної інженерії

Звіт

з лабораторної роботи № 2 з дисципліни  
«Програмування веб-застосунків»  
« Верстка веб-сторінок за допомогою CSS »

Варіант 18 (2)

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( прізвище, ім'я, по батькові)

## **Лабораторна робота 2**

### **Верстка веб-сторінок за допомогою CSS**

**Мета** – ознайомлення з мовою візуального оформлення CSS та освоєння сучасних способів верстки веб-сторінок.

#### **Індивідуальне завдання**

##### **Варіант 2**

#### **Завдання**

1. У вас вже є обраний із 16 варіантів власний варіант виконання роботи відповідно до вашого порядкового номера у списку групи, подальші маніпуляції виконуйте, враховуючи підготовлену головну сторінку веб-сайта з л. р. No1.
2. Засобами HTML і CSS звертайте нові екземпляри головної веб-сторінки вашого веб-сайта згідно з вашим варіантом, використовуючи верстку:
  - А) з допомогою Flexbox CSS,
  - Б) з допомогою Grid CSS,
  - В) без використання Flexbox CSS та Grid CSS,

зберігаючи контент веб-сторінки, з урахуванням позиціювання та візуалізації окремих елементів сторінки. За неможливості виконати котрийсь із пунктів А,Б,В для вашого варіанту поясніть причину. Вкажіть переваги та недоліки видів верстки на основі зверстаних варіантів.

3. Для запису інструкцій CSS використовуйте окремі файли стилів, а у відповідних екземплярах веб-сторінки забезпечте вказівник на ці файли стилів. Не задавайте жодних інструкцій CSS у файлах веб-сторінок.
4. Продемонструвати роботу новоствореного набору веб-сторінок в якості веб-сайту через локальну файлову систему.
5. Скористатися GitHub Pages для публікації вашого веб-сайту в інтернеті.
6. Продемонструйте роботу екземплярів головної веб-сторінки в інтернеті.

## Варіант 2

<div>x</div>		1
2	3	4
		5
<div>y</div>		6

### Хід роботи

#### Flex

<div>Main</div>		INTERESTING ANIMAL	
		What didn't you know?	
<b>Structure</b> <p>All animals are composed of cells, surrounded by a characteristic extracellular matrix composed of collagen and elastic glycoproteins. During development, the animal extracellular matrix forms a relatively flexible framework upon which cells can move about and be reorganised, making the formation of complex structures possible. This may be calcified, forming structures such as shells, bones, and spicules. In contrast, the cells of other multicellular organisms (primarily algae, plants, and fungi) are held in place by cell walls, and so develop by progressive growth. Animal cells uniquely possess the cell junctions called tight junctions, gap junctions, and desmosomes.</p> <p>With few exceptions—in particular, the sponges and placozoans—animal bodies are differentiated into tissues. These include muscles, which enable locomotion, and nerve tissues, which transmit signals and coordinate the body. Typically, there is also an internal digestive chamber with either one opening (in Ctenophora, Cnidaria, and flatworms) or two openings (in most bilaterians).</p>	<b>Animal</b> <p>Animals are multicellular, eukaryotic organisms in the biological kingdom Animalia. With few exceptions, animals consume organic material, breathe oxygen, are able to move, can reproduce sexually, and go through an ontogenetic stage in which their body consists of a hollow sphere of cells, the blastula, during embryonic development. Over 1.5 million living animal species have been described—of which around 1 million are insects—but it has been estimated there are over 7 million animal species in total. Animals range in length from 8.5 micrometres (0.00033 in) to 33.6 metres (110 ft). They have complex interactions with each other and their environments, forming intricate food webs. The scientific study of animals is known as zoology.</p> <p>Most living animal species are in Bilateria, a clade whose members have a bilaterally symmetric body plan. The Bilateria include the protostomes, containing animals such as nematodes, arthropods, flatworms, annelids and molluscs, and the deuterostomes, containing the echinoderms and the chordates, the latter including the vertebrates. Life forms interpreted as early animals were present in the Ediacaran biota of the late Precambrian. Many modern animal phyla became clearly established in the fossil record as marine species during the Cambrian explosion, which began around 539 million years ago. 6,331 groups of genes common to all living animals have been identified; these may have arisen from a single common ancestor that lived 650 million years ago.</p> <p>Historically, Aristotle divided animals into those with blood and those without. Carl Linnaeus created the first hierarchical biological classification for animals in 1758 with his Systema Naturae, which Jean-Baptiste Lamarck expanded into 14 phyla by 1809. In 1874, Ernst Haeckel divided the animal kingdom into the multicellular Metazoa (now synonymous for Animalia) and the Protozoa, single-celled organisms no longer considered animals. In modern times, the biological classification of animals relies on advanced techniques, such as molecular phylogenetics, which are effective at demonstrating the evolutionary relationships between taxa.</p> <p>Humans make use of many animal species, such as for food (including meat, milk, and eggs), for materials (such as leather and wool), as pets, and as working animals including for transport. Dogs have been used in hunting, as have birds of prey, while many terrestrial and aquatic animals were hunted for sports. Nonhuman animals have appeared in art from the earliest times and are featured in mythology and religion.</p>		<b>Menu</b> <ul style="list-style-type: none"><li>Flex</li><li>Grid</li><li>Table</li></ul>
	<b>Animal</b>		<b>Characteristics</b> <p>Animals have several characteristics that set them apart from other living things. Animals are eukaryotic and multicellular. Unlike plants and algae, which produce their own nutrients, animals are heterotrophic, feeding on organic material and digesting it internally. With very few exceptions, (example; Henneguya zschokkei) animals respire aerobically. All animals are motile (able to spontaneously move their bodies) during at least part of their life cycle, but some animals, such as sponges, corals, mussels, and barnacles, later become sessile. The blastula is a stage in embryonic development that is unique to animals, allowing cells to be differentiated into specialised tissues and organs.</p>
		<b>Reproduction and development</b> <p>Nearly all animals make use of some form of sexual reproduction. They produce haploid gametes by meiosis; the smaller, motile gametes are spermatozoa and the larger, non-motile gametes are ova. These fuse to form zygotes, which develop via mitosis into a hollow sphere, called a blastula. In sponges, blastula larvae swim to a new location, attach to the seabed, and develop into a new sponge. In most other groups, the blastula undergoes more complicated rearrangement. It first invaginates to form a gastrula with a digestive chamber and two separate germ layers, an external ectoderm and an internal endoderm. In most cases, a third germ layer, the mesoderm, also develops between them. These germ layers then differentiate to form tissues and organs.</p> <p>Repeated instances of mating with a close relative during sexual reproduction generally leads to inbreeding depression within a population due to the increased prevalence of harmful recessive traits. Animals have evolved numerous mechanisms for avoiding close inbreeding.</p> <p>Some animals are capable of asexual reproduction, which often results in a genetic clone of the parent. This may take place through fragmentation; budding, such as in Hydra and other cnidarians; or parthenogenesis, where fertile eggs are produced without mating, such as in aphids.</p>	

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Table(without Flex and Grid)

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Посилання на код

<https://github.com/IP15-MieshkovAndrii/SecondSemestrLab/tree/main/Web/Lab2/src>

Посилання на сайт:

<https://ip15-mieshkovandrii.github.io/>

У використанні двовимірного розташування об'єктів Flex стає складним, потребує багато коду. Table має менше коду, легший, але має недоліки, такі як при rowspan усі осередки рядка збільшуються. Grid має менше недоліків та ще менше коду.