

Analise Firestore– Grupo 2

CP904TIN1

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INTRODUÇÃO

Neste Projeto fazemos uma análise de uma plataforma de E-Commerce de uma loja de eletrônicos através do Firebase Firestore.

RESULTADOS E VALIDAÇÃO

Diferente de outros bancos de dados no Firebase é necessário montar funções para fazer consultas no banco de dados, o que dificulta todo o processo.

JUSTIFICATIVA

Auxiliar pequenos negócios que desejam expandir no mercado online e utilizar o Firebase Firestore como banco de dados para fazer consultas e análises.

OBJETIVOS

- Montar queries para trazer insights de valor.
- Analisar o desempenho e dificuldade de utilizar o Firebase Firestore para as operações.

```
const getMaxPricePerCategory = async () => {
  const snapshot = await getDocs(collection(firestore, "purchase"));

  const maxPricesMap = new Map();
  snapshot.forEach(doc => {
    const data = doc.data();
    const category = data.category_code;
    const price = data.price;

    if (maxPricesMap.has(category)) {
      if (price > maxPricesMap.get(category)) {
        maxPricesMap.set(category, price);
      }
    }
    return
  })

  maxPricesMap.set(category, price);
};

maxPricesMap.forEach((maxPrice, category) => {
  console.log(`Category: ${category}, Maximum Price: ${maxPrice}`);
});
}
```

```
Category: electronics.tablet, Maximum Price: 601.83
Category: electronics.audio.headphone, Maximum Price: 324.05
Category: , Maximum Price: 613.4
Category: furniture.kitchen.table, Maximum Price: 208.31
Category: electronics.smartphone, Maximum Price: 1433.54
Category: appliances.kitchen.refrigerators, Maximum Price: 1550.9
Category: appliances.personal.scales, Maximum Price: 38.17
Category: electronics.video.tv, Maximum Price: 1967.57
Category: computers.components.cpu, Maximum Price: 416.64
Category: computers.notebook, Maximum Price: 1127.29
Category: computers.peripherals.monitor, Maximum Price: 722.69
Category: computers.peripherals.printer, Maximum Price: 532.38
Category: appliances.kitchen.kettle, Maximum Price: 55.53
Category: computers.components.memory, Maximum Price: 49.98
Category: electronics.clocks, Maximum Price: 532.38
Category: country.yard.weather_station, Maximum Price: 23.12
Category: appliances.kitchen.blender, Maximum Price: 185.16
Category: accessories.bag, Maximum Price: 53.22
Category: appliances.iron, Maximum Price: 277.75
Category: appliances.kitchen.mixer, Maximum Price: 90.25
Category: computers.peripherals.mouse, Maximum Price: 109.93
Category: electronics.telephone, Maximum Price: 37.01
Category: appliances.kitchen.meat_grinder, Maximum Price: 268.5
Category: appliances.personal.hair_cutter, Maximum Price: 85.63
Category: appliances.environment.air_heater, Maximum Price: 72.89
Category: kids.skates, Maximum Price: 393.5
Category: appliances.kitchen.microwave, Maximum Price: 185.16
Category: furniture.bedroom.pillow, Maximum Price: 3.45
Category: appliances.environment.vacuum, Maximum Price: 347.2
```

```
const getPurchasesPerBrand = async () => {
  const snapshot = await getDocs(collection(firestore, "purchase"));
  const purchasesPerBrandMap = new Map();

  snapshot.forEach(doc => {
    const brand = doc.data().brand;
    if (purchasesPerBrandMap.has(brand)) {
      purchasesPerBrandMap.set(brand, purchasesPerBrandMap.get(brand) + 1);
      return
    }
    purchasesPerBrandMap.set(brand, 1);
  });

  purchasesPerBrandMap.forEach((count, brand) => {
    console.log(`Brand: ${brand}, Purchases: ${count}`);
  });
}
```

```
Brand: samsung, Purchases: 226
Brand: huawei, Purchases: 43
Brand: karcher, Purchases: 2
Brand: maestro, Purchases: 2
Brand: apple, Purchases: 73
Brand: lg, Purchases: 35
Brand: polaris, Purchases: 59
Brand: intel, Purchases: 1
Brand: philips, Purchases: 56
Brand: asus, Purchases: 13
Brand: , Purchases: 59
Brand: epson, Purchases: 4
Brand: sbs, Purchases: 5
Brand: geyzer, Purchases: 2
Brand: tefal, Purchases: 28
Brand: kingston, Purchases: 6
Brand: ava, Purchases: 89
Brand: beurer, Purchases: 9
Brand: schwiizer, Purchases: 1
Brand: scarlett, Purchases: 10
Brand: caso, Purchases: 1
```

AGRADECIMENTOS

Agradecemos a Facens e aos professores por todo o suporte durante o desenvolvimento deste projeto.

CONCLUSÃO

Utilizar o Firestore para fazer análises de banco de dados pode ser um pouco difícil, sendo mais prático utilizar outros bancos de dados, como o mongoDB.